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DATA QUALITY ASSESSMENT IN THE PRIVATE HEALTH SECTOR PROGRAM- SUPPORTED HEALTH FACILITIES IN ETHIOPIA

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DATA QUALITY ASSESSMENT IN PRIVATE HEALTH SECTOR PROGRAM-SUPPORT HEALTH FACILITIES IN ETHIOPIA

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ACRONYMS

| | |
|----------|---|
| AIDS | Acquired Immuno-Deficiency Syndrome |
| ANC | Antenatal Care |
| ART | Anti-retroviral Therapy |
| ARV | Anti-retroviral |
| CPT | Cotrimoxazole Preventive Therapy |
| CTX | Cotrimoxazole |
| DQA | Data Quality Assessment |
| EC | Ethiopian Calendar |
| EP | Extra Pulmonary |
| FGAE | Family Guidance Association - Ethiopia |
| FMoH | Federal Ministry of Health |
| HC | Higher Clinic |
| HCP | Health Care Providers |
| HCT | HIV Counseling and Testing |
| HIV | Human Immuno-Virus |
| HMIS | Health Management Information System |
| HP | Hospital |
| INH | Isoniazid |
| L & D | Labor and Delivery |
| M & E | Monitoring and Evaluation |
| MC | Medium Clinic |
| MRN | Medical Record Number |
| NA | Not Applicable |
| PEPFAR | President's Emergency Plan for AIDS Relief |
| PHSP | Private Health Sector Program |
| PITC | Provider Initiated HIV Counseling and Testing |
| PMTCT | Prevention of Mother to Child Transmission |
| PPM DOTS | Public Private Mix Directly Observed Treatment Short Course |
| QM | Quality management |
| R & R | Recording and Reporting |
| RHBs | Regional Health Bureaus |
| Rx | Treatment |

| | |
|-------|--|
| SNNP | Southern Nations, Nationalities and People |
| SS | Supportive Supervision |
| TB | Tuberculosis |
| UAN | Unique ART Number |
| USAID | United States Agency for International Development |
| VCT | Voluntary HIV Counseling and Testing |
| WHO | World Health Organization |

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EXECUTIVE SUMMARY

The Private Health Sector Program (PHSP) conducted a health facility level Data Quality Assessment (DQA) to measure the level of the data quality for selected indicators at a number PHSP supported sites and their data management system's ability to collect, analyze, aggregate and report quality data. The DQA took place from May 25, 2012 to July 03, 2012 in 54 sites from six PHSP supported regions: Addis Ababa (six sites), Amhara (16 sites), Dire-Dawa (eight sites), Harari (two sites), Oromia (11 sites) and Southern Nations, Nationalities and Peoples (SNNP) (11 sites).

The data were collected from the health facilities by PHSP staff and by taking samples from facility registers and patient cards. The required data quality dimensions of the selected indicators were assessed by taking random samples from facility registers (ART, pre-ART, antenatal care, delivery, HIV counseling and testing and TB) and also randomly selected patient cards from pre-ART and ART patients. The sample size for each program available was 10 (e.g., 10 follow up cards from ART and pre-ART registers). In some cases if the sample was small resulting from small patient loads, any and all available data were reviewed (i.e., January 1, 2012 to March 31, 2012).

The DQA has identified the following findings:

A. System

- From the 54 health facilities assessed in the six regions, 39 (72%) had assigned staff for recording service delivery data in the source document while only 10 of them had staff reviewing the data quality, accuracy and completeness before reporting. Only two facilities had included a monitoring and evaluation unit in their organizational structure.

B. Health facility patient registers

B.1. Pre-ART and ART registers and follow up cards

- Sixty-three samples of pre-ART client cards were selected and assessed for the data quality dimensions. TB screening and treatment start dates were filled for approximately 85%, while the cotrimoxazole preventive therapy (CPT) start dates were documented for only 64% of the clients.
- 80 ART patient cards were randomly selected and checked for their data quality. The variables of CD4 count, functional status, weight, ART start date, and a unique ART number were properly documented for 95% of the clients selected. Information on only 68% of the clients was documented for those who had TB screening.

B.2. Antenatal care (ANC) and labor and delivery registers

- Of the total 40 cases selected randomly from ANC registers, gestational age, HIV tests and test results were documented. From those tested HIV positive, five (42%) initiated ART or ARV prophylaxis, and seven out of 12 (58%) were referred for HIV care, treatment and support. Only 13% of the 40 clients had their partner tested for HIV.
- For all of the 20 cases selected randomly from delivery registers, age, delivery date and time were recorded and 80% (16 clients) tested for HIV had documented test results. Two out of sixteen (12.5%) were tested HIV positive and ARV prophylaxis was provided for both mothers and the newborns. Both HIV positive mothers were counseled on infant feeding and one of the two was referred for chronic care.

B.3. HCT registers

- 415 records were randomly selected from the voluntary counseling and testing (VCT) and provider-initiated testing and counseling (PITC) registers. Final test results were documented for 392 cases (95%) but post-test counseling was not documented for 83 cases (22%).

B.4. TB registers

- 435 records were randomly selected from the TB registers. For most clients (about 93%), weight, intensive phase drug/dose, and treatment start dates were documented but smear results and category of TB were not recorded for 7% and 2% respectively. Seventy-eight percent (78%) of the clients (338) have records on their HIV test performance.
- 352 records for those who recently completed TB treatment were randomly selected: 74.3% were either cured or completed treatment (23.4% cured and 50.9% completed) and 15.2% were transferred to other health facilities; 7.6% of the TB patients died; 2.6% defaulted; and 0.3% treatment failure.

From the DQA findings PHSP recommends that the private facilities need to assign staff to be responsible for recording and reporting and they should be trained or oriented on the variables. Clinical mentors and program officers should follow up recording and recording practice at each private health facility so that the data documented will be used both internally and externally.

I. INTRODUCTION

The Private Health Sector Program (PHSP), funded by the President' Emergency Plan for AIDS Relief (PEPFAR) through the United State Agency for International Development (USAID) and implemented by Abt Associates, works to increase demand and provision of high-quality public health services in the private sector by building sustainable public-private partnerships. The goal of PHSP is to enable the Federal Ministry of Health (FMOH) and Regional Health Bureaus (RHBs) to effectively partner with private health providers to deliver public health services, while improving the quality and affordability of these services.

It is important for the FMOH to base health care policy decisions on data that are accurate, timely, and complete. Routine monitoring activities of PHSP assisted health services programs generate important data for overall program assessment. These data are generated with high quality to accurately evaluate the effect of implemented program components such as diagnosis, treatment and follow up of TB and HIV patients. Quality data are characterized by **completeness, accuracy, validity, reliability** and should be reflective of good clinical practices, e.g., in maintaining **confidentiality**. Collection and review of patient data starts at the health facility level.

- **Accuracy:** Also known as validity. Accurate data are considered correct: the data measure what they are intended to measure. Accurate data minimize errors (e.g., recording or interviewer bias, transcription error, sampling error) to a point of being negligible.
- **Reliability:** The data generated by a program's information system are based on protocols and procedures that do not change according to who uses them and when or how often they are used. The data are reliable because they are measured and collected consistently.
- **Precision:** This means that the data have sufficient detail. For example, an indicator requires the number of individuals who received HIV counseling and testing and received their test results, by sex of the individual. An information system lacks precision if it is not designed to record the sex of the individual who received counseling and testing.
- **Completeness:** Completeness means that an information system from which the results are derived is appropriately inclusive: it represents the complete list of eligible persons or units and not just a fraction of the list.
- **Timeliness:** Data are timely when they are up-to-date (current), and when the information is available on time. Timeliness is affected by: (1) the rate at which the program's information system is updated; (2) the rate of change of actual program activities; and (3) when the information is actually used or required.
- **Integrity:** Data have integrity when the system used to generate them is protected from deliberate bias or manipulation for political or personal reasons
- **Confidentiality:** Confidentiality means that clients are assured that their data will be maintained according to national and/or international standards for data. This means that personal data are not disclosed inappropriately, and that data in hard copy and electronic form are treated with appropriate levels of security (e.g., kept in locked cabinets and in password protected files).

2. OBJECTIVE OF DATA QUALITY ASSESSMENTS

The objective of this initiative is to determine the quality of data being collected by private health facilities which are supported by PHSP. These will also help to assess and improve the overall data quality. Specifically these DQAs also aim to review the facility's data management system's ability to collect, analyze, aggregate, and report data and the completeness of data being collected on individual patient cards and recorded in facility registers for analysis and reporting purposes.

3. METHODOLOGY AND STUDY SITES

DQA tools designed by USAID were adapted and modified to be suitable for private health facilities. Based on these dimensions of data quality, the DQA tool is comprised of two components: (1) assessing data management and reporting systems and (2) verifying reported data for key indicators. The tool focuses exclusively on verifying the quality of reported data and assessing the underlying data management and reporting systems.

The purpose of assessing data management and the reporting system is to identify potential challenges to data quality at three levels: the program/project monitoring and evaluation contact point/person, the service delivery sites, and any intermediary aggregation level (a point where the service delivery site sends reports prior to these being sent to the program/project M&E contact point/person or another relevant level. The purpose of verifying reported data on selected indicators is to assess, on a limited scale, if service delivery and intermediate aggregation sites are collecting and reporting data to measure the audited indicator(s) accurately and on time and to cross-check the reported results with other data sources. Specifically the DQAs looked at selected HIV and TB related indicators in ART, pre-ART, ANC, delivery, HCT and TB registers.

Before the initiation of the exercises, discussions were done at the PHSP office level with the DQA tools to have a common understanding on data collection and analysis (see the DQA tools in the annex section). Data were collected from the health facilities in collaboration with the regional coordinators. The facilities were selected based on purposive sampling and priority was given based on their previous performance in data quality such as timeliness, completeness, reliability, integrity, etc.

The DQAs were conducted at 54 private health facilities supported by PHSP in four regions: Amhara, Harari, Oromia, and Southern Nations, Nationalities, and Peoples (SNNP) and two city administrations, Addis Ababa and Dire Dawa (Table 1). Data collection took place from May 25, 2012, to July 03, 2012. Data were collected from structured interviews with facility staff and by taking samples from patient cards and facility registers. Registers were randomly selected for review (follow up registers for ART and pre-ART patients) and all the recording formats were reviewed to check whether they maintained the required data quality dimensions.

TABLE 1. THE DISTRIBUTION OF HEALTH FACILITIES IN WHICH DQAS CONDUCTED

| Region | # facilities in the region | # sites DQA done | % coverage |
|--------------------|----------------------------|------------------|------------|
| Addis Ababa | 79 | 6 | 8% |
| Amhara | 73 | 16 | 22% |
| Dire Dawa | 13 | 8 | 62% |
| Harar | 6 | 2 | 33% |
| Oromia | 84 | 11 | 13% |
| SNNP | 48 | 11 | 22% |
| Tigray | 39 | 0 | 0% |
| TOTAL | 342 | 54 | 16% |

4. RESULTS AND DISCUSSION

4.1 ADDIS ABABA CITY ADMINISTRATION

4.1.1 OVERALL DATA MANAGEMENT AND REPORTING SYSTEM

Of the six health facilities assessed in Addis Ababa City Administration, only the African Service Committee (i.e., one out of six assessed facilities) included a monitoring and evaluation (M&E) unit responsible for data management in their organizational structure and had filled all staff positions dedicated to M&E and data management systems (Table 2). Another facility, Missionaries of Charity, also had all staff positions dedicated to M&E and data management systems filled even though there was no M&E unit in its organizational structure. Five of their six facilities (83%) had assigned staff for recording service delivery data in the respective source documents such as ART, PMTCT, TB, etc., registers; four (80%) of them were trained on service delivery data recording and reporting. None of the assessed facilities have a future plan to train on recoding and reporting (even 2 facilities did not have staff already trained on this) on recording and reporting. None of the facilities assigned staff to review data quality, or to create an aggregated report.

TABLE 2. FACILITY DATA MANAGEMENT AND REPORTING SYSTEM (N=6)

| Variable | Yes | No | NA | Total | Valid Total | Valid Yes Percentage | No Percentage |
|--|-----|----|----|-------|-------------|----------------------|---------------|
| Staff assigned for recording data (service delivery) | 5 | 1 | 0 | 6 | 6 | 83.3% | 16.7% |
| Staff already trained on R&R | 4 | 2 | 0 | 6 | 6 | 66.7% | 33.3% |
| Management staff reviewing aggregated data available | 0 | 6 | 0 | 6 | 6 | 0% | 100% |
| Staff reviewing aggregated report available | 0 | 6 | 0 | 6 | 6 | 0% | 100% |
| Staff reviewing data quality available | 0 | 6 | 0 | 6 | 6 | 0% | 100% |
| M&E data management systems fully occupied | 2 | 4 | 0 | 6 | 6 | 33.3% | 66.7% |
| Training plan for staff on R&R | 0 | 6 | 0 | 6 | 6 | 0% | 100% |
| Organizational structure | 1 | 5 | 0 | 6 | 6 | 16.7% | 83.3% |
| Note: R&R= recording and reporting | | | | | | | |

4.1.2 REGISTERS REVIEW

4.1.2.1 ART REGISTER FOR ADULTS

To assess the data quality aspects of the care and treatment services 3 health facilities were selected by purposive sampling technique¹. A total of 30 patient follow up cards were randomly selected and verification done to see the consistency of data recorded in the follow card were similar to the ART registers and focus on to basic socio demographic variables and for other parameters which are related to quality of care services. The patient names and card number, ART start date, unique ART number, original regimens were correctly recorded both in the follow up card and ART register, i.e., 100% complete. Others such as sex and age were 90 and 80% complete. Cotrimoxazole start date and TB screening were documented on 75% of eligible client and 63% of cases respectively. The completeness of ART registers for other variables are depicted in Table 3.

TABLE 3. ART REGISTER COMPLETENESS (N=30)

| Variable | Yes | No | NA | Total | Valid Total | Valid Yes Percentage | No Percentage |
|-------------------|-----|----|----|-------|-------------|----------------------|---------------|
| Patient card no. | 30 | 0 | 0 | 30 | 30 | 100% | 0% |
| Patient full name | 30 | 0 | 0 | 30 | 30 | 100% | 0% |
| Sex | 27 | 3 | 0 | 30 | 30 | 90% | 10% |
| Why eligible | 19 | 11 | 0 | 30 | 30 | 63.3% | 36.7% |
| Age | 24 | 6 | 0 | 30 | 30 | 80% | 20% |
| WHO stage | 29 | 1 | 0 | 30 | 30 | 96.7% | 3.3% |
| CD4 | 28 | 2 | 0 | 30 | 30 | 93.3% | 6.7% |
| Functional status | 29 | 1 | 0 | 30 | 30 | 96.7% | 3.3% |
| ART start date | 30 | 0 | 0 | 30 | 30 | 100% | 0% |
| Weight | 28 | 2 | 0 | 30 | 30 | 93.3% | 6.7% |
| Unique ART no. | 30 | 0 | 0 | 30 | 30 | 100% | 0% |
| Screened for TB | 11 | 19 | 0 | 30 | 30 | 36.7% | 63.3% |
| TB Rx start date | 2 | 0 | 28 | 30 | 2 | 100% | 0% |
| INH start date | 5 | 0 | 25 | 30 | 5 | 100% | 0% |
| CPT start date | 18 | 6 | 6 | 30 | 24 | 75% | 25% |
| Original regimens | 30 | 0 | 0 | 30 | 30 | 100% | 0% |

4.1.2.2 PRE-ART REGISTER FOR ADULTS

To assess the consistency of data at follow up card and the pre ART registers a total of 20 follow cards were randomly selected and reviewed (the Missionaries of Charity and African Service Committee). Almost all of the selected cases had fully (100 percent) recorded and consistence with the pre ART registers. The variables were socio-demographic (name, age, and sex; address was missing in one instance) as well as others such as date of confirmed HIV diagnosis, date enrolled in HIV care, and TB screening. Cotrimoxazole start date was recorded for 91 percent of the patients eligible for cotrimoxazole prophylaxis.

¹ This purposive sampling technique was used because of patient load.

TABLE 4. PRE-ART REGISTER COMPLETENESS (N=20)

| Variable | Yes | No | NA | Total | Valid Total | Valid Yes Percentage | No Percentage |
|------------------|-----|----|-----|-------|-------------|----------------------|---------------|
| Name | 20 | 0 | 0 | 20 | 20 | 100% | 0% |
| Age | 20 | 0 | 0 | 20 | 20 | 100% | 0% |
| Sex | 20 | 0 | 0 | 20 | 20 | 100% | 0% |
| Address | 19 | 1 | 0 | 20 | 20 | 95% | 5% |
| Confirmed HIV+ | 20 | 0 | 0 | 20 | 20 | 100% | 0% |
| Date enrolled | 20 | 0 | 0 | 20 | 20 | 100% | 0% |
| Screened for TB | 10 | 0 | 10* | 20 | 10 | 100% | 0% |
| TB Rx start date | 0 | 0 | 20 | 20 | 0 | 100% | 0% |
| CPT start date | 10 | 1 | 9 | 20 | 11 | 90.9% | 9.1% |

* All unavailable cases are from Missionaries of Charity. This is because the facility used the old (non-HMIS) pre-ART register, which did not have a "TB screening" column.

4.1.2.3 FOLLOW-UP CARD FOR PRE-ART AND ART CLIENTS

To assess the completeness of essential variables in the follow-up card for pre-ART and ART patients, the assessment team randomly selected a total of 30 cards from the three PHSP-supported facilities and checked whether the variables had been documented at least one time in the quarter. The results showed that patient follow-up date, weight, functional status, and WHO clinical stage were recorded in all cases and that dispensing of CPT was documented for all those eligible for cotrimoxazole (CTX) and were started on Isoniazid (INH) prophylaxis or TB treatment if they were eligible (Table 5). For 11 out of 13 (85%) females under 49 years of age, the family planning methods they used were documented. For 10% of the selected cards, TB screening had not been documented the required minimum of at least once during follow up visits over the last three months.

TABLE 5. FOLLOW-UP CARD COMPLETENESS (N=30)

| Variable | Yes | No | NA | Total | Valid Total | Valid Yes Percentage | No Percentage |
|------------------------|-----|----|----|-------|-------------|----------------------|---------------|
| Currently on care | 30 | 0 | 0 | 30 | 30 | 100% | 0% |
| Follow-up date | 30 | 0 | 0 | 30 | 30 | 100% | 0% |
| Weight | 30 | 0 | 0 | 30 | 30 | 100% | 0% |
| Functional status | 30 | 0 | 0 | 30 | 30 | 100% | 0% |
| TB screening | 27 | 3 | 0 | 30 | 30 | 90% | 10% |
| WHO stage | 30 | 0 | 0 | 30 | 30 | 100% | 0% |
| INH or TB treatment | 6 | 0 | 24 | 30 | 6 | 100% | 0% |
| CPT dispensed | 19 | 0 | 11 | 30 | 19 | 100% | 0% |
| Family planning Method | 11 | 2 | 17 | 30 | 13 | 84.6% | 15.4% |

4.1.2.4 ART REGISTER COMPLETENESS AT SIX MONTHS AFTER STARTING ART (COHORT AT SIX MONTHS)

Completeness of the data in the ART registers after six months from initiating ART is critical due to the fact that information collected and recorded at this particular time showed the level of effort exerted for quality of care of patients.

To assess the data completeness, a two-month cohort of patients who had been in treatment for six months was chosen and the data completeness for the above variables were checked (i.e., CD4 count,

functional status, weight, and height). Of the total patients selected (30), the ARV drug regimen and weight were completely documented, i.e., 100%. The completeness for CD4 count and height were 83% and 37% respectively (Table 6).

TABLE 6. ART REGISTER COMPLETENESS AT SIX MONTHS (N=30)

| Variable | Yes | No | NA | Total | Valid Total | Valid Yes Percentage | No Percentage |
|-------------------|-----|----|----|-------|-------------|----------------------|---------------|
| Regimen | 30 | 0 | 0 | 30 | 30 | 100% | 0% |
| Functional status | 29 | 1 | 0 | 30 | 30 | 96.7% | 3.3% |
| Weight | 30 | 0 | 0 | 30 | 30 | 100% | 0% |
| Height | 11 | 19 | 0 | 30 | 30 | 36.7% | 63.3% |
| CD4 | 25 | 5* | 0 | 30 | 30 | 83.3% | 16.7% |

* All the five were from Missionaries of Charity and represent 50% of the records checked at that facility.

4.1.2.5 PMTCT REGISTER ANC CLINIC

To assess the completeness of essential variables for PMTCT indicators, ANC registers were selected. A total of 40 ANC client records were randomly selected to check data completeness during the final weeks in April 2012-June 2012. All 40 cases recorded gestational age, HIV test acceptance, and test results (Table 7 and Figure 1). Of the 12 patients who tested HIV positive, five (46%) were initiated on ART or ARV prophylaxis (for prevention of mother-to-child transmission, or PMTCT) and seven (58%) were referred for HIV care, treatment, and support. Counseling on infant feeding was documented for 64%. A partner HIV test result was documented for only 13% of the total 40 cases.

TABLE 7. PMTCT/ANC REGISTER COMPLETENESS (N=40)

| Variable | Yes | No | NA | Total | Valid Total | Valid Yes Percentage | No Percentage |
|--|-----|----|----|-------|-------------|----------------------|---------------|
| Gestational age | 40 | 0 | 0 | 40 | 40 | 100% | 0% |
| HIV test accepted | 40 | 0 | 0 | 40 | 40 | 100% | 0% |
| HIV test result | 40 | 0 | 0 | 40 | 40 | 100% | 0% |
| Initiated ART or ARV prophylaxis* | 5 | 6 | 29 | 40 | 11 | 45.5% | 54.5% |
| Counseling on infant feeding provided*, | 16 | 9 | 15 | 40 | 25 | 64% | 36% |
| Referred for care, treatment, and support* | 7 | 5 | 28 | 40 | 12 | 58.3% | 41.7% |
| Partner HIV test results documented | 5 | 35 | 0 | 40 | 40 | 12.5% | 87.5% |

- For HIV cases

4.1.2.6 PMTCT REGISTERS: LABOR AND DELIVERY

To assess the completeness of essential variables in the delivery register, a total of 20 pregnant women who delivered without obstetric complication were randomly selected. The data were collected from what was documented in the final weeks in the months of April 2012-June 2012.

Age, delivery date and time were recorded for all 20 women. According to the register, 80% of the women were tested for HIV and their test results documented. Two out of 16 (12.5%) tested HIV positive and ARV prophylaxis was provided for both mothers and newborns; both mothers were counseled on infant feeding and only one of the HIV positive mothers was referred for chronic care.

TABLE 8. PMTCT/DELIVERY REGISTER COMPLETENESS (N=20)

| Variable | Yes | No | NA | Total | Valid Total | Valid Yes % | No % |
|-----------------------------|-----|----|----|-------|-------------|-------------|-------|
| Age | 20 | 0 | 0 | 20 | 20 | 100% | 0% |
| Delivery date and time | 20 | 0 | 0 | 20 | 20 | 100% | 0% |
| HIV test accepted | 16 | 4 | 0 | 20 | 20 | 80% | 20% |
| HIV test result | 16 | 0 | 4 | 20 | 20 | 80% | 20% |
| HIV-positive delivery | 2 | 14 | 4 | 20 | 16 | 12.5% | 87.5% |
| ARV prophylaxis for mother | 2 | 0 | 18 | 20 | 2 | 100% | 0% |
| ARV prophylaxis for newborn | 2 | 0 | 17 | 20 | 2 | 100% | 0% |
| Counseled on infant feeding | 2 | 0 | 18 | 20 | 2 | 100% | 0% |
| Referred for care | 1 | 1 | 18 | 20 | 2 | 50% | 50% |

4.2 AMHARA REGION

4.2.1 OVERALL DATA MANAGEMENT AND REPORTING SYSTEM

Of the 16 health facilities assessed, only Gamby Higher Clinic in Bahir Dar had an M&E unit in the organizational structure responsible for data management. All staff positions dedicated to M&E and data management systems were filled. Six facilities (38%) had assigned trained staff to record and report, and they were responsible for recording service delivery data in the source documents such as ART, TB, etc., registers. Only three facilities (19%) had a plan to train their relevant staff on recording and reporting processes. In seven facilities (56%), senior management staff reviewed the aggregated data, but only two facilities (13%) had staff review data quality (Table 9).

TABLE 9: FACILITY DATA MANAGEMENT AND REPORTING SYSTEM (N=16 FACILITIES)

| Variable | Yes | No | NA | Total | Valid Total | Valid Yes Percentage | No Percentage |
|--|-----|----|----|-------|-------------|----------------------|---------------|
| Staff assigned for recording data (service delivery) | 6 | 10 | 0 | 16 | 16 | 37.5% | 62.5% |
| Staff already trained on R&R | 7 | 9 | 0 | 16 | 16 | 43.8% | 56.3% |
| Management staff reviewing aggregated data available | 9 | 7 | 0 | 16 | 16 | 56.3% | 43.8% |
| Staff reviewing aggregated report available | 7 | 9 | 0 | 16 | 16 | 43.8% | 56.3% |
| Staff reviewing data quality available | 2 | 14 | 0 | 16 | 16 | 12.5% | 87.5% |
| M&E data management systems fully occupied | 1 | 15 | 0 | 16 | 16 | 6.3% | 93.8% |
| Training plan for staff on R&R | 3 | 13 | 0 | 16 | 16 | 18.8% | 81.3% |
| Organizational structure | 1 | 15 | 0 | 16 | 16 | 6.3% | 93.8% |

4.2.2 REGISTER REVIEW

4.2.2.1 ART REGISTER FOR ADULTS

A total of 50 patient cards were randomly selected from five facilities and the data were verified through cross checking with the ART registers. Patient name, sex, and age were consistent in 96% of the cases and similarly with the ART register. Original regimen was fully (100%) recorded and CD4, functional status, weight, ART start date, and unique ART number were recorded in more than 95% of the cases.

TB start data were recorded for 67% of the eligible cases and CPT for 64% of the sick eligible clients. INH was documented for none of the eligible cases and TB screening documented for only 12% of the clients.

TABLE 10. ART REGISTER COMPLETENESS (N=50)

| Variable | Yes | No | NA | Total | Valid Total | Valid Yes % | No % |
|-------------------|-----|----|----|-------|-------------|-------------|-------|
| Patient card no. | 39 | 11 | 0 | 50 | 50 | 78% | 22% |
| Patient full name | 49 | 1 | 0 | 50 | 50 | 98% | 2% |
| Sex | 49 | 1 | 0 | 50 | 50 | 98% | 2% |
| Why eligible | 42 | 8 | 0 | 50 | 50 | 84% | 16% |
| Age | 48 | 2 | 0 | 50 | 50 | 96% | 4% |
| WHO stage | 47 | 3 | 0 | 50 | 50 | 94% | 6% |
| CD4 | 48 | 2 | 0 | 50 | 50 | 96% | 4% |
| Functional status | 49 | 1 | 0 | 50 | 50 | 98% | 2% |
| ART start date | 48 | 2 | 0 | 50 | 50 | 96% | 4% |
| Weight | 48 | 2 | 0 | 50 | 50 | 96% | 4% |
| Unique ART no. | 49 | 1 | 0 | 50 | 50 | 98% | 2% |
| Screened for TB | 44 | 6 | 0 | 50 | 50 | 88% | 12% |
| TB Rx start date | 6 | 3 | 40 | 49 | 9 | 66.7% | 33.3% |
| INH start date | 0 | 6 | 43 | 49 | 6 | 0% | 100% |
| CPT start date | 32 | 18 | 0 | 50 | 50 | 64% | 36% |
| Original regimens | 50 | 0 | 0 | 50 | 50 | 100% | 0% |

4.2.2.2 PRE-ART REGISTER FOR ADULTS

Forty-three pre-ART client cards were selected from five facilities and cross checked with the follow-up card to check the consistency of the data between the two. Patient name and sex were completely documented, and age and address were documented for almost all (98%). TB screening was documented for 81%, and TB treatment start date was documented for 86%, but CPT start dates were documented for only 55%. Date enrolled-in-HIV care and date confirmed-HIV-positive were recorded for 93% and 83%, respectively.

TABLE 11. PRE-ART REGISTER COMPLETENESS (N=43)

| Variable | Yes | No | NA | Total | Valid Total | Valid Yes % | No % |
|------------------|-----|----|----|-------|-------------|-------------|-------|
| Name | 43 | 0 | 0 | 43 | 43 | 100% | 0% |
| Age | 42 | 1 | 0 | 43 | 43 | 97.7% | 2.3% |
| Sex | 43 | 0 | 0 | 43 | 43 | 100% | 0% |
| Address | 42 | 1 | 0 | 43 | 43 | 97.7% | 2.3% |
| Confirmed HIV+ | 36 | 7 | 0 | 43 | 43 | 83.7% | 16.3% |
| Date enrolled | 40 | 3 | 0 | 43 | 43 | 93% | 7% |
| Screened for TB | 35 | 8 | 0 | 43 | 43 | 81.4% | 18.6% |
| TB Rx start date | 6 | 1 | 36 | 43 | 7 | 85.7% | 2.3% |
| CPT start date | 17 | 14 | 12 | 43 | 31 | 54.8% | 45.2% |

4.2.2.3 FOLLOW-UP CARD FOR PRE-ART AND ART CLIENTS

To assess the completeness of essential variables in the follow-up card for pre-ART and ART patients, the DQA team selected 50 patient cards randomly from five facilities and checked whether documentation had been done at least once in the quarter. Of the selected cards, 92% were currently receiving patient follow-up care. Follow-up date, weight, functional status, and WHO clinical stage were recorded on more than 97% of the selected cards at least once in the previous three months. Dispensing of CPT was documented for 98% of the 20 patients eligible for CTX, but INH prophylaxis or TB treatment start date were not documented for any of the 20 cards. For 20 out of 25 (80%) of females under 49 years, the family planning methods used were documented. In 10% of cases, TB screening was not documented even once in the past three months.

TABLE 12. FOLLOW-UP CARD COMPLETENESS (N=50)

| Variable | Yes | No | NA | Total | Valid Total | Valid Yes % | No % |
|--------------------------|-----|----|----|-------|-------------|-------------|-------|
| Currently on care | 46 | 4 | 0 | 50 | 50 | 92% | 8% |
| Follow-up date | 49 | 1 | 0 | 50 | 50 | 98% | 2% |
| Weight | 49 | 1 | 0 | 50 | 50 | 98% | 2% |
| Functional status | 50 | 0 | 0 | 50 | 50 | 100% | 0% |
| TB screening | 45 | 5 | 0 | 50 | 50 | 90% | 10% |
| WHO stage | 49 | 1 | 0 | 50 | 50 | 98% | 2% |
| INH or TB treatment | 0 | 20 | 30 | 50 | 20 | 0% | 100% |
| CPT dispensed | 41 | 1 | 8 | 50 | 42 | 97.6% | 2.4% |
| CPT adherence assessment | 21 | 10 | 19 | 50 | 31 | 67.7% | 32.3% |
| Family planning method | 20 | 5 | 25 | 50 | 25 | 80% | 20% |

4.2.2.4 ART REGISTER COMPLETENESS AT SIX MONTHS AFTER STARTING ART (COHORT AT SIX MONTHS)

To assess the ART register completeness six months after patients started ART, the DQA team randomly selected a two-month cohort of patients who had been in treatment for six months and checked whether their CD4 count, functional status, weight, and height were assessed and documented after six months in treatment. In general, documentation was not sufficient. Of the 14 patient cards selected, the ARV drug regimen and height were documented for barely more than a third (36%) and functional status for less than half (43%). CD4 level was documented for 57% and weight for 71%.

TABLE 13. ART REGISTER COMPLETENESS AT SIX MONTHS (N=14)

| Variable | Yes | No | NA | Total | Valid Total | Valid Yes % | No % |
|-------------------|-----|----|----|-------|-------------|-------------|-------|
| Regimen | 5 | 9 | 0 | 14 | 14 | 35.7% | 64.3% |
| Functional status | 6 | 8 | 0 | 14 | 14 | 42.9% | 57.1% |
| Weight | 10 | 4 | 0 | 14 | 14 | 71.4% | 28.6% |
| Height | 5 | 9 | 0 | 14 | 14 | 35.7% | 64.3% |
| CD4 | 8 | 6 | 0 | 14 | 14 | 57.1% | 42.9% |

Note: Ethio G. Hospital's four cases (50% of client percent) did not record any selected variables at the six-month point.

4.2.2.5 HCT REGISTER

To assess the completeness of selected essential variables in the HCT register, PHSP staff randomly selected and checked the data quality of 130 records from the registers in 13 facilities. In all cases, all selected socio-demographic variables (age, sex, date of test, and marital status, educational status, and employment status) were documented in the register. HIV testing, final test results, test result one, and pre-and post-test counseling also were fully documented. Data completeness for test results 2 and 3 were complete for only 48% and 95% respectively.

TABLE 14. HCT REGISTER COMPLETENESS FOR DQA (N=130 RECORDS)

| Variable | Yes | No | NA | Total | Valid Total | Valid Yes % | No % |
|-----------------------------|-----|----|----|-------|-------------|-------------|-------|
| Final test result | 130 | 0 | 0 | 130 | 130 | 100.0% | 0.0% |
| Test result 1 | 130 | 0 | 0 | 130 | 130 | 100.0% | 0.0% |
| Received pretest counseling | 130 | 0 | 0 | 130 | 130 | 100.0% | 0.0% |
| Post-test counseling | 130 | 0 | 0 | 130 | 130 | 100.0% | 0.0% |
| Test result 2 | 40 | 44 | 46 | 130 | 84 | 47.6% | 52.4% |
| Test result 3 | 3 | 55 | 72 | 130 | 58 | 5.2% | 94.8% |

4.2.2.6 TB REGISTER

To assess the completeness of selected essential variables in the TB register, PHSP staff randomly selected and checked the data quality of 150 records of TB patients registered for TB treatment in 15 health facilities. Patient age, sex, and unit TB number were fully recorded, but the patient name and address were missing from one percent and 3% respectively. In contrast the Medical Registration Number (MRN) was documented for only 29 (19%) of the patients (Table 15).

TABLE 15 TB REGISTER COMPLETENESS FOR DQA (N=130 RECORDS)

| Category | Variable | Yes | No | NA | Total | Valid Total | Valid Yes % | No % |
|------------------|----------------------|-----|-----|-----|-------|-------------|-------------|-------|
| Socio-demography | Name of patient | 148 | 2 | 0 | 150 | 150 | 98.7% | 1.3% |
| | Age | 150 | 0 | 0 | 150 | 150 | 100% | 0% |
| | Sex | 150 | 0 | 0 | 150 | 150 | 100% | 0% |
| | Unit TB no. | 150 | 0 | 0 | 150 | 150 | 100% | 0% |
| | Address of patient | 136 | 4 | 10 | 150 | 140 | 97.1% | 2.9% |
| | MRN | 29 | 121 | 0 | 150 | 150 | 19.3% | 80.7% |
| TB treatment | Category of TB | 149 | 1 | 0 | 150 | 150 | 99.3% | 0.7% |
| | Weight | 149 | 1 | 0 | 150 | 150 | 99.3% | 0.7% |
| | Intensive phase drug | 150 | 0 | 0 | 150 | 150 | 100% | 0% |
| | Intensive phase dose | 150 | 0 | 0 | 150 | 150 | 100% | 0% |
| | Treatment start date | 150 | 0 | 0 | 150 | 150 | 100% | 0% |
| | Smear result | 115 | 15 | 20 | 150 | 130 | 88.5% | 11.5% |
| TB - HIV | HIV test offered | 125 | 25 | 0 | 150 | 150 | 83.3% | 16.7% |
| | HIV test performed | 112 | 13 | 25 | 150 | 125 | 89.6% | 10.4% |
| | HIV test result | 112 | 0 | 38 | 150 | 112 | 100% | 0% |
| | Enrolled in HIV care | 8 | 31 | 111 | 150 | 39 | 20.5% | 79.5% |

| | | | | | | | | |
|----------------------|----------------------------|-----|----|-----|-----|-----|-------|-------|
| collaboration | ART started | 9 | 27 | 114 | 150 | 36 | 25% | 75% |
| | CPT started | 11 | 29 | 110 | 150 | 40 | 27.5% | 72.5% |
| Drug and lab | Continuation phase drug | 122 | 2 | 26 | 150 | 124 | 98.4% | 1.6% |
| | Continuation phase dose | 122 | 2 | 26 | 150 | 124 | 98.4% | 1.6% |
| | Sputum results at 2 months | 40 | 11 | 99 | 150 | 51 | 78.4% | 21.6% |
| | Sputum results at 5 months | 28 | 16 | 106 | 150 | 44 | 63.6% | 36.4% |
| | Sputum results at 7 months | 23 | 20 | 107 | 150 | 43 | 53.5% | 46.5% |

Regarding TB treatment variables, the register contained all data (100%) for intensive phase drug, dose and treatment start dates; one case was missing data in the category of TB and weight. Smear results were not documented for 15 (11.5%) out of the 130 cases.

Regarding TB- HIV collaborative activities, the offer to test for HIV was not documented for 25 clients (17%); of those offered, an HIV test was performed for 112 (90%) of them and the test results were documented for all tests performed. Of those who tested HIV positive, only 21% (eight of 39) were recorded for enrolled-in-HIV care (pre-ART) and 25% (nine of 36) were recorded as having started ART; for the others there was no record in TB register. CPT start date was documented for 11 out of 40 (28%).

Almost all (98%) continuation phase drug and phase dose variables were recorded. Of 51 TB patients registered for TB treatment and eligible for a sputum test at two months, there were 40 (78%) documented sputum results in the register; similarly, of the 44 eligible for a sputum test at five months, 28 (64%) results were documented and of the 43 eligible for a sputum test at seven months, 23 (54%) results were documented.

4.2.2.7 TB TREATMENT OUTCOMES

To assess the completeness of TB treatment outcome variables in TB register, PHSP staff randomly selected and checked register data on 147 patients who had recently completed TB treatment in the 15 health facilities. As shown in Figure 3, of the total valid cases selected (140), 77% of TB patients were either cured or completed treatment (22% cured and 55% completed) and 11% transferred to other health facilities before completing treatment. Another 11% died before completing treatment, and one percent defaulted (interrupted their TB treatment for eight or more weeks). There was no failed treatment case.

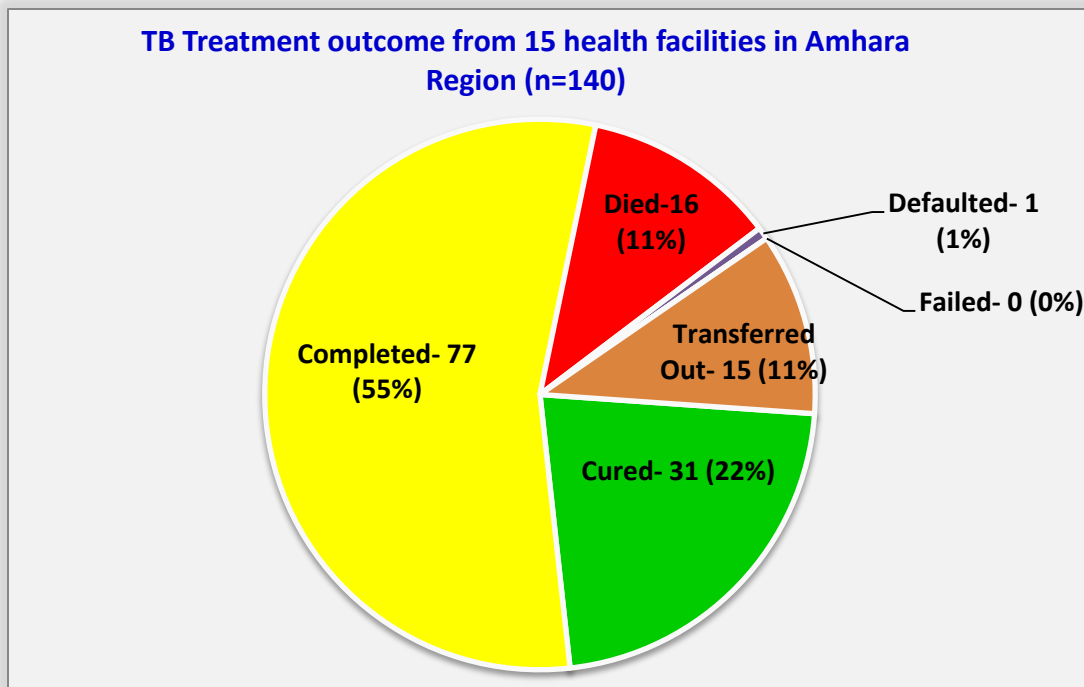


FIGURE I. TB TREATMENT OUTCOMES IN 15 HEALTH FACILITIES (NUMBER OF OUTCOMES AND PERCENT OF ALL REVIEWED CASES) (N=140)

4.3 DIRE DAWA CITY ADMINISTRATION

4.3.1 OVERALL DATA MANAGEMENT AND REPORTING SYSTEM

All of the eight facilities assessed in Dire Dawa City Administration region had assigned staff for recording service delivery data on the source document and all facilities trained relevant staff on data management processes and tools. Only one facility had a plan to provide training to relevant staff on recording and reporting service delivery data. None of the facilities had an organizational structure which included an M&E system, nor did any have any assigned staff to review data quality. Senior staff did not review aggregated reports.

TABLE 16. FACILITY DATA MANAGEMENT AND REPORTING SYSTEM (N=8)

| Variable | Yes | No | NA | Total | Valid Total | Valid Yes % | No % |
|--|-----|----|----|-------|-------------|-------------|-------|
| Staff assigned for recording data (service delivery) | 8 | 0 | 0 | 8 | 8 | 100% | 0% |
| Staff already trained on R&R | 8 | 0 | 0 | 8 | 8 | 100% | 0% |
| Management staff reviewing aggregated data available | 0 | 8 | 0 | 8 | 8 | 0% | 100% |
| Staff reviewing aggregated report available | 0 | 8 | 0 | 8 | 8 | 0% | 100% |
| Staff reviewing data quality available | 0 | 8 | 0 | 8 | 8 | 0% | 100% |
| M&E data management systems fully occupied | 0 | 8 | 0 | 8 | 8 | 0% | 100% |
| Training plan for staff on R&R | 1 | 7 | 0 | 8 | 8 | 12.5% | 87.5% |
| Organizational structure | 0 | 8 | 0 | 8 | 8 | 0% | 100% |

4.3.2 REGISTER REVIEW

4.3.2.1 HCT REGISTER

To assess the completeness of selected essential variables in the HCT register, PHSP staff randomly selected 50 records from the HCT register in seven facilities. Two of the facilities (ART General Hospital and Yemariam-work Hospital) were found not have the registration logbook but instead had a laboratory logbook and thus were excluded from the summary.

For all cases, all selected socio-demographic variables (age, sex, date of test, and marital, educational, and employment status) were completely documented in the HCT register. Final test results and test result one were not documented for 6% and post-test counseling was not documented for 26%. Test result two was not documented for three out of 10 cases (30%) and test three was not documented for any of the three.

TABLE 17. HCT REGISTER COMPLETENESS (N=50)

| Category | Variable | Yes | No | NA | Total | Valid Total | Valid Yes % | No % |
|------------|------------------------------|-----|----|----|-------|-------------|-------------|------|
| HCT | Final test result | 47 | 3 | 0 | 50 | 50 | 94% | 6% |
| | Test result 1 | 47 | 3 | 0 | 50 | 50 | 94% | 6% |
| | Received pre-test counseling | 50 | 0 | 0 | 50 | 50 | 100% | 0% |
| | Post-test counseling | 37 | 13 | 0 | 50 | 50 | 74% | 26% |
| | Test result 2 | 7 | 3 | 40 | 50 | 10 | 70% | 30% |
| | Test result 3 | 0 | 3 | 47 | 50 | 3 | 0% | 100% |

4.3.2.2 TB REGISTER

To assess the completeness of selected essential variables in the TB register, PHSP staff randomly selected and checked the data quality of 80 records of patients who had had TB treatment in the eight health facilities. All patient names were documented; age and sex were documented for 95% and the TB number and patient address were recorded for 91%. The documentation of MRN (98%) was good relative to other regions.

TABLE 18. TB REGISTER COMPLETENESS (N=80)

| Category | Variable | Yes | No | NA | Total | Valid Total | Valid Yes % | No % |
|-----------------------------|-------------------------|-----|----|----|-------|-------------|-------------|-------|
| Socio-demography | Name of patient | 80 | 0 | 0 | 80 | 80 | 100% | 0% |
| | Age | 77 | 3 | 0 | 80 | 80 | 96.3% | 3.8% |
| | Sex | 76 | 4 | 0 | 80 | 80 | 95% | 5% |
| | Unit TB no. | 74 | 6 | 0 | 80 | 80 | 92.5% | 7.5% |
| | Address of patient | 73 | 7 | 0 | 80 | 80 | 91.3% | 8.8% |
| | MRN | 78 | 2 | 0 | 80 | 80 | 97.5% | 2.5% |
| TB treatment | Category of TB | 79 | 1 | 0 | 80 | 80 | 98.8% | 1.3% |
| | Weight | 75 | 5 | 0 | 80 | 80 | 93.8% | 6% |
| | Intensive phase drug | 80 | 0 | 0 | 80 | 80 | 100% | 0% |
| | Intensive phase dose | 80 | 0 | 0 | 80 | 80 | 100% | 0% |
| | Treatment start date | 80 | 0 | 0 | 80 | 80 | 100% | 0% |
| | Smear result | 71 | 5 | 4 | 80 | 76 | 93.4% | 6.6% |
| TB-HIV collaboration | HIV test offered | 71 | 9 | 0 | 80 | 80 | 88.8% | 11.3% |
| | HIV test performed | 68 | 3 | 9 | 80 | 71 | 95.8% | 4.2% |
| | HIV test result | 68 | 0 | 12 | 80 | 68 | 100% | 0% |
| | Enrolled in HIV care | 2 | 12 | 66 | 80 | 14 | 14.3% | 85.7% |
| | ART started | 4 | 8 | 68 | 80 | 12 | 33.3% | 66.7% |
| | CPT started | 10 | 5 | 65 | 80 | 15 | 66.7% | 33.3% |
| | Continuation phase drug | 47 | 4 | 29 | 80 | 51 | 92.2% | 7.8% |

| | | | | | | | | |
|---------------------|----------------------------|----|---|----|----|----|-------|-------|
| Drug and lab | Continuation phase dose | 47 | 4 | 29 | 80 | 51 | 92.2% | 7.8% |
| | Sputum results at 2 months | 15 | 0 | 65 | 80 | 15 | 100% | 0% |
| | Sputum results at 5 months | 7 | 2 | 71 | 80 | 9 | 77.8% | 22.2% |
| | Sputum results at 7 months | 7 | 0 | 73 | 80 | 7 | 100% | 0% |

Regarding TB treatment, selected variables, intensive phase drug and dose, treatment start date, and category of TB were almost all documented – only one case had not been. Weight was recorded for 94% but smear results were not documented for 7% (five out of 76).

Regarding TB-HIV collaborative activities, nine clients (11%) did not have any documentation that an HIV test was offered; of those offered, an HIV test was performed for 96% of them and the test results were documented for all tests performed. Of those who tested HIV positive, only 14% (two of 14) were shown as enrolled for HIV care (pre-ART) and 33% (four of 12) as having started ART; for others, there was no record in the TB register of enrollment in HIV care and treatment. The CPT start date was documented for 10 out of 15 cases (67%).

For most cases (92%), the TB register documented the continuation phase drug and continuation phase dose. Of the 15 TB patients registered for TB treatment and eligible for a sputum test at two months, all had a documented sputum result in the register; of the nine eligible for a sputum test at five months, seven (78%) had a documented result, and all seven had a documented sputum test at seven months.

4.3.2.3 TB TREATMENT OUTCOMES

To assess the completeness of TB treatment outcome variables, PHSP staff randomly selected and checked the data quality of 70 records of patients who recently completed TB treatment in seven health facilities. As shown in Figure 4, of the 67 valid cases, 73% of patients were either cured or completed treatment (10% cured, 63% completed) and 16% transferred to other health facilities before completing the TB treatment. Another 6% died before completing treatment, and 3% defaulted (interrupted their TB treatment for eight or more weeks). Only one (2%) treatment case failed.

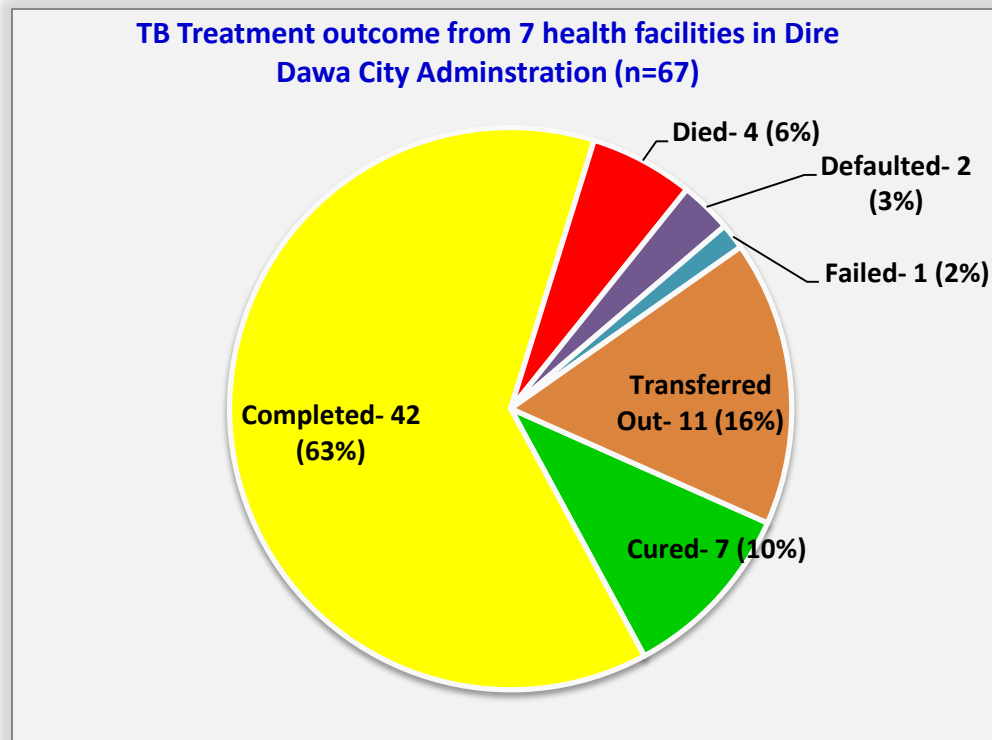


FIGURE 2. TB TREATMENT OUTCOMES IN SEVEN HEALTH FACILITIES (N=67)

4.4 HARARI REGION

4.4.1 OVERALL DATA MANAGEMENT AND REPORTING SYSTEM

The two facilities assessed in Harari Region (Yemag Medical Center and Awash Clinic) had assigned staff for recording service delivery data in the source document and they trained assigned staff on data management processes and tools; one facility had a plan to provide training to relevant staff on recording and reporting service delivery data (Table 18), but neither facility had an organizational structure comprising an M&E system, nor did they assign staff to review the data quality or had senior staff to review aggregated reports.

TABLE 19. FACILITY DATA MANAGEMENT AND REPORTING SYSTEM (N=2 FACILITIES)

| Variable | Yes | No | NA | Total | Valid Total | Valid Yes % | No % |
|--|-----|----|----|-------|-------------|-------------|------|
| Staff assigned for recording data (service delivery) | 2 | 0 | 0 | 2 | 2 | 100% | 0% |
| Staff already trained on R&R | 2 | 0 | 0 | 2 | 2 | 100% | 0% |
| Management staff reviewing aggregated data available | 0 | 2 | 0 | 2 | 2 | 0% | 100% |
| Staff reviewing aggregated report available | 0 | 2 | 0 | 2 | 2 | 0% | 100% |
| Staff reviewing data quality available | 0 | 2 | 0 | 2 | 2 | 0% | 100% |
| M&E data management systems fully occupied | 0 | 2 | 0 | 2 | 2 | 0% | 100% |
| Training plan for staff on R&R | 1 | 1 | 0 | 2 | 2 | 50% | 50% |
| Organizational structure | 0 | 2 | 0 | 2 | 2 | 0% | 100% |

4.4.2 REGISTER REVIEW

4.4.2.1 HCT REGISTER

To assess the completeness of patient data recorded in the HCT register, PHSP staff randomly selected and checked the data quality of 20 records from the registers from the two facilities.

The socio-demographic variables of age, sex, and date of test were recorded in all patient records. Marital status was recorded for 55% of patients and educational status for 25%. Employment status of the client was not documented for all cases. Regarding HIV testing, the final test result was documented for all cases (Table 19). Yimag Medical Center had not used the standard VCT registration book and therefore, was excluded from the analysis.

TABLE 20. HCT REGISTER COMPLETENESS (N=20)

| Category | Variable | Yes | No | NA | Total | Valid Total | Valid Yes % | No % |
|-------------|-----------------------------|-----|----|----|-------|-------------|-------------|------|
| HIV testing | Final test result | 20 | 0 | 0 | 20 | 20 | 100% | 0% |
| | Test result 1 | 10 | 10 | 0 | 20 | 20 | 50% | 50% |
| | Received pretest counseling | 9 | 11 | 0 | 20 | 20 | 45% | 55% |
| | Post-test counseling | 4 | 16 | 0 | 20 | 20 | 20% | 80% |
| | Test result 2 | 0 | 0 | 20 | 20 | 0 | 0% | 0% |
| | Test result 3 | 0 | 0 | 20 | 20 | 0 | 0% | 0% |

4.4.2.2 TB REGISTER

To assess the completeness of selected essential variables in the TB register, the DQA team randomly selected and checked the data quality of 20 records. Since Awash Medium Clinic did not provide the Public-Private Mix (PPM) Directly Observed Therapy Short Course (DOTS) service (it only referred patients), it was excluded from the summary.

Of the 10 valid cases from Yemag Medical Center, the socio-demographic variables of name, age, sex, TB number, and patient address were all documented. Documentation of MRN was good relative to other regions: 90% of the selected TB patients' MRN was documented.

Regarding TB treatment, all selected variables (category of TB, weight, intensive phase drug and dose, treatment start date and smear result) were documented in the TB register.

Regarding TB - HIV collaborative activities, of the 10 cases registered for TB treatment, the following variables were documented for all cases: HIV test offer, HIV test performed, and the test result. For those who tested HIV positive, only 33% (one of three) was enrolled for HIV care (pre-ART) and 67% started ART according to documentation in the TB register (Table 20). A CPT start date was documented for 33%.

The variables continuation phase drug and phase dose were 86% documented. For the one patient registered for TB treatment and eligible for sputum tests at two months and at five months, both test results were documented.

TABLE 21. TB REGISTER COMPLETENESS (N=10)

| Category | Variable | Yes | No | NA | Total | Valid Total | Valid Yes % | No % |
|-----------------------------|----------------------------|-----|----|----|-------|-------------|-------------|-------|
| TB-HIV collaboration | HIV test offered | 10 | 0 | 0 | 10 | 10 | 100% | 0% |
| | HIV test performed | 10 | 0 | 0 | 10 | 10 | 100% | 0% |
| | HIV test result | 10 | 0 | 0 | 10 | 10 | 100% | 0% |
| | Enrolled in HIV care | 1 | 2 | 7 | 10 | 3 | 33.3% | 66.7% |
| | ART started | 2 | 1 | 7 | 10 | 3 | 66.7% | 33.3% |
| | CPT started | 1 | 2 | 7 | 10 | 3 | 33.3% | 66.7% |
| Drug and lab | Continuation phase drug | 6 | 1 | 3 | 10 | 7 | 85.7% | 14.3% |
| | Continuation phase dose | 6 | 1 | 3 | 10 | 7 | 85.7% | 14.3% |
| | Sputum results at 2 months | 1 | 0 | 9 | 10 | 1 | 100% | 0% |
| | Sputum results at 5 months | 1 | 0 | 9 | 10 | 1 | 100% | 0% |
| | Sputum results at 7 months | 0 | 0 | 10 | 10 | 0 | 0% | 0% |

4.4.2.3 TB TREATMENT OUTCOMES

To assess the completeness of TB treatment outcome variables in the TB register of the one health facility (Yemag Medical Center), PHSP staff randomly selected and checked the data quality of 10 records of patients who had recently completed TB treatment. As shown in Figure 5, 50% of patients completed treatment and 40% transferred to other health facilities before completing treatment. One patient (10%) died before completing treatment. There was no cured, defaulted, or failed treatment case.

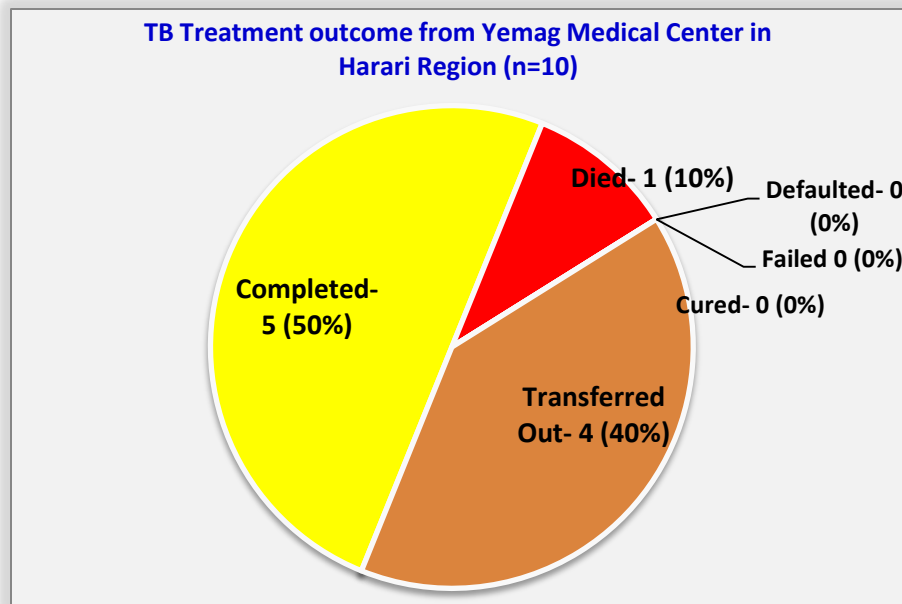


FIGURE 3. TB TREATMENT OUTCOMES, YEMAG MEDICAL CENTER (N=10)

4.5 OROMIA REGION

4.5.1 OVERALL DATA MANAGEMENT AND REPORTING SYSTEM

All of the 11 facilities assessed in Oromia Region had assigned staff for recording service delivery data in the source document but none of the assessed facilities had trained staff on the data management processes and tools; only one facility (9%) had a plan to provide training to relevant staff on recording and reporting service delivery data. Six out of eleven (55%) facilities had assigned staff to review the data quality and senior staff had reviewed aggregated reports. But none of the facilities had included an M&E unit in the organizational structure responsible for the data management system.

TABLE 22. FACILITY DATA MANAGEMENT AND REPORTING SYSTEM (N=11 FACILITIES)

| Variable | Yes | No | NA | Total | Valid Total | Valid Yes % | No % |
|--|-----|----|----|-------|-------------|-------------|-------|
| Staff assigned for recording data (service delivery) | 11 | 0 | 0 | 11 | 11 | 100% | 0% |
| Staff already trained on R&R | 0 | 11 | 0 | 11 | 11 | 0% | 100% |
| Management staff reviewing aggregated data available | 7 | 4 | 0 | 11 | 11 | 63.6% | 36.4% |
| Staff reviewing aggregated report available | 6 | 5 | 0 | 11 | 11 | 54.5% | 45.5% |
| Staff reviewing data quality available | 6 | 5 | 0 | 11 | 11 | 54.5% | 45.5% |
| M&E data management systems fully occupied | 0 | 11 | 0 | 11 | 11 | 0% | 100% |
| Training plan for staff on R&R | 1 | 10 | 0 | 11 | 11 | 9.1% | 90.9% |
| Organizational structure | 0 | 11 | 0 | 11 | 11 | 0% | 100% |

4.5.2 REGISTER REVIEW

4.5.2.1 HC REGISTER

To assess the completeness of selected essential variables in the HCT register, PHSP staff randomly selected and checked the data quality of 110 records from the 11 facilities.

For most cases, the socio-demographic variables of age, sex, and date of test were documented at more than 90%; marital and educational status were documented for 86% and employment status for 76%. Regarding HIV testing, the final test result was not documented in six cases (5%), all at Temkinel Afia Medical Clinic. The clinic also did not document test results one, two, and three for the six cases.

TABLE 23. HCT REGISTER COMPLETENESS (N=110)

| Category | Variable | Yes | No | NA | Total | Valid Total | Valid Yes % | No % |
|------------------|--------------------|-----|----|----|-------|-------------|-------------|-------|
| Socio-demography | Age | 100 | 10 | 0 | 110 | 110 | 90.9% | 9.1% |
| | Date | 103 | 7 | 0 | 110 | 110 | 93.6% | 6.4% |
| | Sex | 110 | 0 | 0 | 110 | 110 | 100% | 0% |
| | Marital status | 67 | 10 | 33 | 110 | 77 | 87% | 13% |
| | Educational status | 66 | 11 | 33 | 110 | 77 | 85.7% | 14.3% |
| | Employment status | 55 | 17 | 38 | 110 | 72 | 76.4% | 23.6% |
| HIV | Final test result | 104 | 6 | 0 | 110 | 110 | 94.5% | 5.5% |
| | Test result 1 | 104 | 6 | 0 | 110 | 110 | 94.5% | 5.5% |

| | | | | | | | | |
|---------|------------------------------|----|---|-----|-----|----|-------|-------|
| testing | Received pre-test counseling | 65 | 7 | 38 | 110 | 72 | 90.3% | 9.7% |
| | Post-test counseling | 64 | 8 | 38 | 110 | 72 | 88.9% | 11.1% |
| | Test result 2 | 30 | 7 | 73 | 110 | 37 | 81.1% | 18.9% |
| | Test result 3 | 2 | 6 | 102 | 110 | 8 | 25.0% | 75% |

4.5.2.2 TB REGISTER

To assess the completeness of selected essential variables in the TB register, PHSP staff randomly selected and checked the data quality of 106 records of patients receiving TB treatment from the registers in the 11 facilities. All patient names were documented (Table 23). A small number of the age category (less than one percent) and TB numbers were not documented. The patient address was missing from 25% of cases, and the MRN was not documented for 43 (41%).

Regarding TB treatment, more than 97% of the selected cases had the categories of TB, weight, intensive phase drug and dose, treatment start date, and smear result documented in the register.

Regarding TB - HIV collaborative activities, of the 106 patients registered for TB treatment, an HIV test offer was not documented for 13 (12%); of those offered an HIV test, the test was performed for 82% and the test result documented for 97% of the tests performed. Of the patients who tested HIV positive, only one of 13 (8%) was documented as having enrolled in HIV care (pre-ART) or having started ART; no other patient enrollment in HIV care and treatment was recorded in the register. A CPT start date was documented for two of the 13 (15%).

The variables continuation phase drug and phase dose were documented for 99% of the cases. Of the 33 patients registered for TB treatment and eligible for a sputum test at two months, 32 (97%) had a documented test result in the TB register; of the 25 eligible for a sputum test at five months, 24 (96%) results were registered; and of the 23 eligible for a sputum test at seven months, 21 (91%) results were registered.

TABLE 24. TB REGISTER COMPLETENESS (N=106)

| Category | Variable | Yes | No | NA | Total | Valid Total | Valid Yes % | No % |
|------------------|----------------------|-----|----|----|-------|-------------|-------------|-------|
| Socio-demography | Name of patient | 106 | 0 | 0 | 106 | 106 | 100% | 0% |
| | Age | 105 | 1 | 0 | 106 | 106 | 99.1% | 0.9% |
| | Sex | 103 | 3 | 0 | 106 | 106 | 97.2% | 2.8% |
| | Unit TB no. | 105 | 1 | 0 | 106 | 106 | 99.1% | 0.9% |
| | Address of patient | 80 | 26 | 0 | 106 | 106 | 75.5% | 24.5% |
| | MRN | 63 | 43 | 0 | 106 | 106 | 59.4% | 40.6% |
| TB treatment | Category of TB | 104 | 2 | 0 | 106 | 106 | 98.1% | 1.9% |
| | Weight | 103 | 3 | 0 | 106 | 106 | 97.2% | 2.8% |
| | Intensive phase drug | 104 | 1 | 1 | 106 | 105 | 99% | 10% |
| | Intensive | 102 | 3 | 1 | 106 | 105 | 97.1% | 2.9% |

| | | | | | | | | |
|-----------------------------|----------------------------|-----|----|----|-----|-----|-------|-------|
| | phase dose | | | | | | | |
| | Treatment start date | 104 | 2 | 0 | 106 | 106 | 98.1% | 1.9% |
| | Smear result | 74 | 2 | 30 | 106 | 76 | 97.4% | 2.6% |
| TB-HIV collaboration | HIV test offered | 93 | 13 | 0 | 106 | 106 | 87.7% | 12.3% |
| | HIV test performed | 77 | 17 | 12 | 106 | 94 | 81.9% | 18.1% |
| | HIV test result | 75 | 2 | 29 | 106 | 77 | 97.4% | 2.6% |
| | Enrolled in HIV care | 1 | 12 | 93 | 106 | 13 | 7.7% | 92.3% |
| | ART started | 1 | 12 | 93 | 106 | 13 | 7.7% | 92.3% |
| | CPT started | 2 | 11 | 93 | 106 | 13 | 15.4% | 84.6% |
| Drug and lab | Continuation phase drug | 69 | 1 | 36 | 106 | 70 | 98.6% | 1.4% |
| | Continuation phase dose | 68 | 1 | 37 | 106 | 69 | 98.6% | 1.4% |
| | Sputum results at 2 months | 32 | 1 | 73 | 106 | 33 | 97% | 3% |
| | Sputum results at 5 months | 24 | 1 | 81 | 106 | 25 | 95.8% | 4.2% |
| | Sputum results at 7 months | 21 | 2 | 83 | 106 | 23 | 91.3% | 8.7% |

4.5.2.3 TB TREATMENT OUTCOME

To assess the completeness of TB treatment outcome variables in the TB register, PHSP staff randomly selected and checked the data quality of 91 records of patients who recently completed TB treatment in the 11 health facilities. As shown in Figure 6, of the 91 valid cases, TB patients were either cured or completed treatment (29% cured and 46% completed) and 16% transferred to other health facilities before completing treatment. Another 3% of the TB patients died before completing treatment, and 6% defaulted (interrupted their TB treatment for eight or more weeks). There was no failed treatment case.

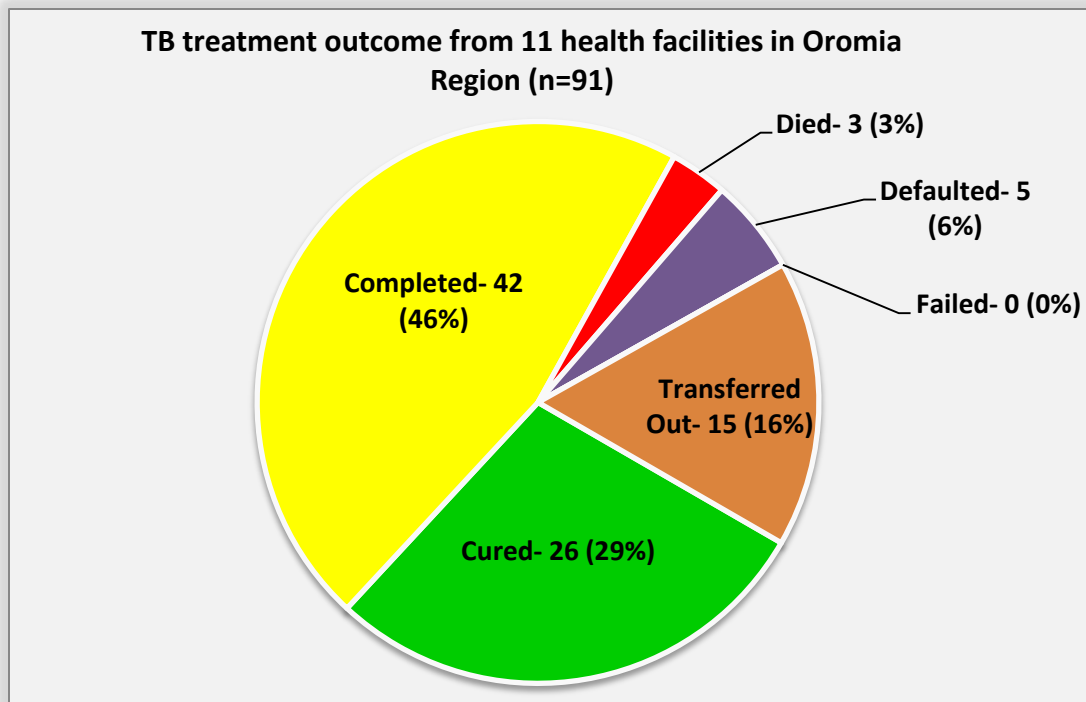


FIGURE 4. TB TREATMENT OUTCOMES FROM 11 HEALTH FACILITIES (N = 91)

4.6 SOUTHERN NATIONS, NATIONALITIES, AND PEOPLE'S REGION

4.6.1 OVERALL DATA MANAGEMENT AND REPORTING SYSTEM

All of the 11 facilities assessed in the SNNP Region had assigned staff for recording service delivery data in the source document, but no facility had staff trained on the data management processes and tools nor was there any plan to provide training to relevant staff on recording and reporting service delivery data (Table 24). Five of the 11 facilities (46%) had senior management staff who reviewed aggregated reports but only two facilities (18%) had assigned staff to review the data quality. None of the facilities had an M&E unit in the organizational structure responsible for data management system.

TABLE 25. FACILITY DATA MANAGEMENT AND REPORTING SYSTEM (N=11 FACILITIES)

| Variable | Yes | No | NA | Total | Valid Total | Valid Yes % | No % |
|--|-----|----|----|-------|-------------|-------------|-------|
| Staff assigned for recording data (service delivery) | 7 | 4 | 0 | 11 | 11 | 63.6% | 36.4% |
| Staff already trained on R&R | 0 | 11 | 0 | 11 | 11 | 0% | 100% |
| Management staff reviewing aggregated data available | 5 | 6 | 0 | 11 | 11 | 45.5% | 54.5% |
| Staff reviewing aggregated report available | 0 | 11 | | 11 | 11 | 0% | 100% |
| Staff reviewing data quality available | 2 | 9 | 0 | 11 | 11 | 18.2% | 81.8% |
| M&E data management systems fully occupied | 0 | 11 | 0 | 11 | 11 | 0% | 100% |
| Training plan for staff on R&R | 0 | 11 | 0 | 11 | 11 | 0% | 100% |
| Organizational structure | 0 | 11 | 0 | 11 | 11 | 0% | 100% |

4.6.2 REGISTER REVIEW

4.6.2.1 HCT REGISTER

To assess the completeness of selected essential variables in the HCT register, PHSP staff randomly selected and checked the data quality of 105 records from the facility registers.

All 105 cases recorded the socio-demographic variables of age, sex, and date of test; marital status was documented for 90% and educational and employment status for about 65%. Regarding HIV testing, the final test result was not documented for 14 cases (13%); nine of these were from Haik Dar (Hawassa) Health Center. Several variables were missing from the register: post-test counseling was not documented for 46 cases (44%); test result two was not documented for 16 out of 37 (43%); and test result three was not recorded for 23 out of 26 (88%).

TABLE 26. HCT REGISTER COMPLETENESS (N=105)

| Category | Variable | Yes | No | NA | Total | Valid Total | Valid Yes % | No % |
|-------------|-----------------------------|-----|----|----|-------|-------------|-------------|-------|
| HIV testing | Final test result | 91 | 14 | 0 | 105 | 105 | 86.7% | 13.3% |
| | Test result 1 | 103 | 2 | 0 | 105 | 105 | 98.1% | 1.9% |
| | Received pretest counseling | 98 | 7 | 0 | 105 | 105 | 93.3% | 6.7% |
| | Post-test counseling | 59 | 46 | 0 | 105 | 105 | 56.2% | 43.8% |
| | Test result 2 | 21 | 16 | 68 | 105 | 37 | 56.8% | 43.2% |
| | Test result 3 | 3 | 23 | 79 | 105 | 26 | 11.5% | 88.5% |

4.6.2.2 TB REGISTER

To assess the completeness of selected essential variables in the TB register, PHSP staff randomly selected and checked the data quality of 79 records in the registers of 10 health facilities. Of the 79 cases, patient name and unit TB number were completely documented (Table 26). Age and sex were mostly documented. The address of the patient was not documented for eight patients (10%) and MRN for 30 patients (38%).

Regarding TB treatment, start date was fully recorded. Categories of TB, intensive phase dose, weight, intensive phase drug, and smear result, were missing in 4% or less of cases.

Regarding TB - HIV collaborative activities, of the 79 patients registered for TB treatment, an HIV test offer was not documented for 13 (17%); of those offered an HIV test, the test was performed for 94% and the test result documented for all the tests performed. Of those who tested HIV positive, only two of 16 (13%) enrolled in HIV care (pre-ART) and four of 14 (29%) started ART; for the others there were no record of enrollment in HIV care or treatment. CPT start dates were documented for three out of 29 cases (10%).

The variables for continuation phase drug and continuation phase dose were documented for about 61% of cases. Of the 64 TB patients registered for TB treatment and eligible for a sputum test at two months, only 28 (44%) had a documented sputum result in the TB register; of the 64 eligible for a sputum test at five months, the results of 18 (28%) were documented in the register; and of the seven eligible for a sputum test at seven months, 14 (22%) were documented.

TABLE 27. TB REGISTER COMPLETENESS (N=79)

| Category | Variable | Yes | No | NA | Total | Valid Total | Valid Yes % | No % |
|-----------------------------|----------------------|-----|----|----|-------|-------------|-------------|-------|
| Socio-demography | Name of patient | 79 | 0 | 0 | 79 | 79 | 100% | 0% |
| | Age | 77 | 2 | 0 | 79 | 79 | 97.5% | 2.5% |
| | Sex | 78 | 1 | 0 | 79 | 79 | 98.7% | 1.3% |
| | Unit TB no. | 79 | 0 | 0 | 79 | 79 | 100% | 0% |
| | Address of patient | 71 | 8 | 0 | 79 | 79 | 89.9% | 10.1% |
| | MRN | 49 | 30 | 0 | 79 | 79 | 62% | 38% |
| TB treatment | Category of TB | 76 | 3 | 0 | 79 | 79 | 96.2% | 3.8% |
| | Weight | 77 | 2 | 0 | 79 | 79 | 97.5% | 2.5% |
| | Intensive phase drug | 78 | 1 | 0 | 79 | 79 | 98.7% | 1.3% |
| | Intensive phase dose | 76 | 3 | 0 | 79 | 79 | 96.2% | 3.8% |
| | Treatment start date | 79 | 0 | 0 | 79 | 79 | 100% | 0% |
| | Smear result | 50 | 2 | 27 | 79 | 52 | 96.2% | 3.8% |
| TB-HIV collaboration | HIV test offered | 66 | 13 | 0 | 79 | 79 | 83.5% | 16.5% |
| | HIV test performed | 62 | 4 | 13 | 79 | 66 | 93.9% | 6.1% |
| | HIV test result | 63 | 1 | 15 | 79 | 64 | 98.4% | 1.6% |
| | Enrolled in HIV | 2 | 14 | 63 | 79 | 16 | 12.5% | 87.5% |

| | | | | | | | | |
|--------------|----------------------------|----|----|----|----|----|-------|-------|
| | care | | | | | | | |
| | ART started | 4 | 10 | 65 | 79 | 14 | 28.6% | 71.4% |
| | CPT started | 3 | 26 | 50 | 79 | 29 | 10.3% | 89.7% |
| Drug and lab | Continuation phase drug | 50 | 29 | 0 | 79 | 79 | 63.3% | 36.7% |
| | Continuation phase dose | 48 | 31 | 0 | 79 | 79 | 60.8% | 39.2% |
| | Sputum results at 2 months | 28 | 36 | 15 | 79 | 64 | 43.8% | 56.3% |
| | Sputum results at 5 months | 18 | 46 | 15 | 79 | 64 | 28.1% | 71.9% |
| | Sputum results at 7 months | 14 | 50 | 15 | 79 | 64 | 21.9% | 78.1% |

4.6.2.3 TB TREATMENT OUTCOMES

To assess the completeness of TB treatment outcome variables in the TB register, PHSP staff randomly selected and checked the data quality of 55 records of patients who had recently completed TB treatment from the registers in seven health facilities. As shown in Figure 7, of the total 34 valid cases selected, 70% of patients were either cured or completed treatment (47% cured and 23% completed) and 21% transferred to other health facilities before completing treatment. Another 6% died before completing treatment, and 3% defaulted (interrupted their TB treatment for eight or more weeks). There was no failed treatment case.

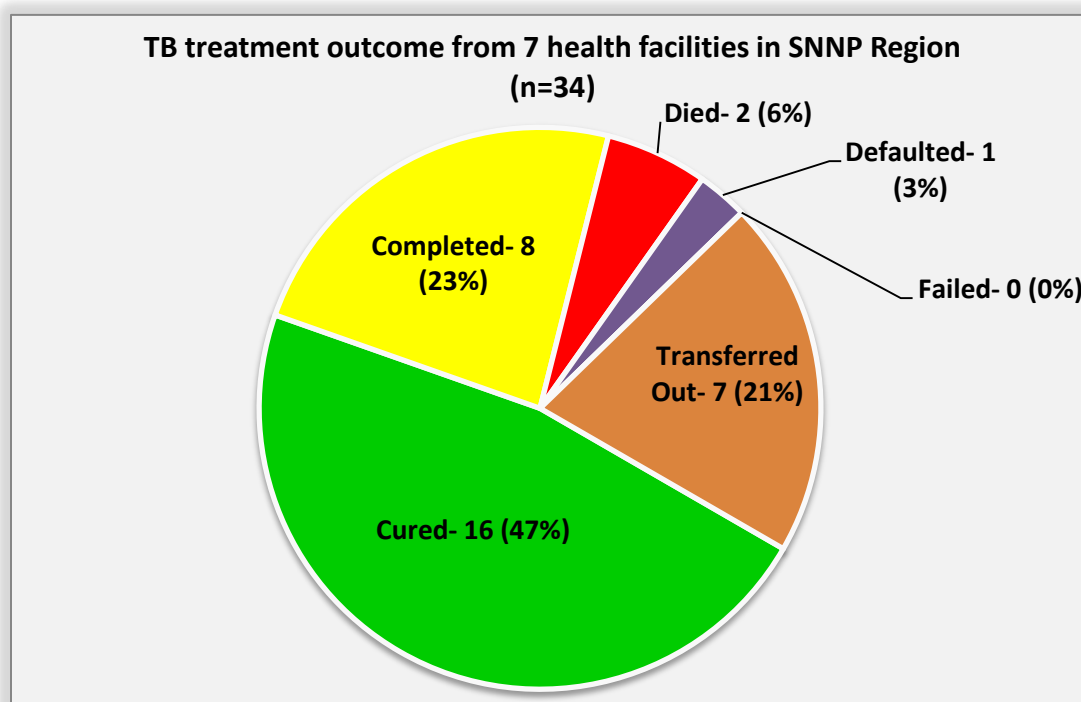


FIGURE 5. TB TREATMENT OUTCOMES FROM SEVEN HEALTH FACILITIES (N=34)

5. ANNEXES: FACILITY SPECIFIC DQA FINDINGS AND RECOMMENDATIONS

The DQA Facility-Specific Findings and Recommendations for DQAs by Region.

Annex A: Addis Ababa City Administration

Annex B: Amhara Region

Annex C: Dire Dawa City Administration

Annex D: Harari Region

Annex E: Oromia Region

Annex F: SNNP Region

ANNEX A: FACILITY-SPECIFIC GAPS IDENTIFIED AND RECOMMENDED ACTIONS FOR DATA QUALITY, ADDIS ABABA

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|----------------------------------|---|---|--------------------------------------|---------------|---|
| ART Register Review | | | | | |
| Mekdim Ethiopia | Of the 10 cases selected from ART register: 1) None had TB screening documented 2) Age had not documented for two cases (20%) 3) Sex had not documented for one case (10%) | ✓ Inform (give on-job orientation/training to) the Health Care Providers to give emphasis and document the TB screening column, age and sex ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | If age or sex are not documented, it will be difficult to disaggregate by sex and age |
| Missionaries of Charity' | Of the 10 cases selected from ART register: 1) TB screening not documented for nine cases (90%) 2) Age not documented for four cases (40%) 3) Sex not documented for two cases (20%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document the TB screening column, age, and sex ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| African Service Committee | Gap not identified | ✓ Continue these good recording practice | | | |
| Pre-ART Register Review | | | | | |
| Missionaries of Charity | Of the 10 cases selected from pre-ART register: 1) TB screening not documented for all cases (100%) | ✓ This is due to this facility using the old (non-HMIS) pre-ART register, which had no "TB screening" column, thus deliver the new HMIS pre-ART register and inform (give on-job orientation/training to) the HCPs to | Program Officers/Clinical Mentors/QM | ASAP | |

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|----------------------------------|--------------------|--|--------------------|-------------|---------|
| | | give emphasis and document the TB screening column ✓ Follow up the practice during follow-up visits | | | |
| African Service Committee | Gap not identified | ✓ Continue these good recording practice | | | |

Follow-up Card Completeness Review for Pre-ART and ART Clients

| | | | | | |
|----------------------------------|---|--|-----------------------------------|---------------|--|
| Mekdim Ethiopia | Of the 10 follow-up cards selected: TB screening not documented for one case (10%) at least once in the quarter (April-June 2012) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document the TB screening status ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Missionaries of Charity | Of the 10 follow-up cards selected: 1) In two cards (20%) TB screening not documented at least once in the quarter (April-June 2012) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document the TB screening status. ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| African Service Committee | Gap not identified | ✓ Continue these good recording practice | | | |

ART Register Completeness Review Six Months after Starting ART (cohort at six month)

| | | | | | |
|----------------------------------|---|--|-----------------------------------|---------------|--|
| Missionaries of Charity | Of the 10 cases randomly selected from two-month cohort that passes six months: 1) CD4 count not documented for five cases (50%) 2) Height not documented for eight cases (80%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document the CD4 count and height at 6, 12, 24, and 36 months ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| African Service Committee | Of the 10 cases randomly selected from two-month cohort that passes six months: 1) Height not documented for all selected cases (100%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document the height at 6, 12, 24, and 36 months ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|----------------------------|--|--|-----------------------------------|---------------|--|
| | | up visits | | | |
| Mekdim Ethiopia | Gap not identified | ✓ Continue these good recording practice | | | |
| ANC Register Review | | | | | |
| General comment | Counseling on infant feeding provided should be documented on the ANC register for only HIV positive clients, e.g., in Karamara HC, all selected cases (10) had documented 'infant feeding provided' | ✓ Inform (give on-job orientation/training to) the HCPs to document "counseling on infant feeding provided" for only HIV positive clients ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | Refer to instruction in the ANC register |
| FGAE | Of the 10 cases selected: 1) Partner HIV test result not documented for all cases (100%) | ✓ Support the facilities by providing/delivering partner's notification cards ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document "Partner HIV test result" ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Ethiopia HC | Of the 10 cases selected: 1) Partner HIV test result not documented for eight cases (80%) | ✓ Support the facilities by providing/delivering partner's notification cards ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document "Partner HIV test result" ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Karamara Clinic | Of the 10 cases selected: 1) Partner HIV test result not documented for eight cases (80%) | ✓ Support the facilities by providing/delivering partner's notification cards ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document "Partner HIV test result" ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|---------------------------------|--|--|-----------------------------------|---------------|---------|
| | | up visits | | | |
| Alafia HC | Of the 10 cases selected: 1) Partner HIV test result not documented for nine cases (90%) | <ul style="list-style-type: none"> ✓ Support the facilities by providing/delivering partner's notification cards ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document "Partner HIV test result" ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Delivery Register Review | | | | | |
| Alafia HC | Of the 10 cases selected: 1) One case had documented HIV-positive delivery, but referred to care not documented | <ul style="list-style-type: none"> ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document for HIV positive deliveries referred to care column ✓ Follow up the practice during follow-up visits | | | |
| Ethiopia HC | Gap not identified | <ul style="list-style-type: none"> ✓ Continue these good recording practices | | | |

ANNEX B: FACILITY-SPECIFIC GAPS IDENTIFIED AND RECOMMENDED ACTIONS FOR DATA QUALITY, AMHARA REGION

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|------------------------------|---|---|-----------------------------------|---------------|---------|
| ART Register Review | | | | | |
| Ethio General HP | Of the 10 cases selected from ART register: Sex not documented for one case (10%) | <ul style="list-style-type: none"> ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document the sex ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Bati General HP | Of the 10 cases selected from ART register: 1) Age and full name not documented for one case (10%) 2) TB screening not documented for two cases (20%) 3) Unique ART number not documented for one case (10%) | <ul style="list-style-type: none"> ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document the age and full name at start of ART; TB screening and UAN ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Selam General HP | Of the 10 cases selected from ART register: 1) Age not documented for one case (10%) 2) ART start date not documented for two cases (20%) | <ul style="list-style-type: none"> ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document the age at start of ART, and ART start date ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Aflagat General HP | Of the 10 cases selected from ART register: TB screening not documented for two cases (20%) | <ul style="list-style-type: none"> ✓ Inform (give on-job orientation/training to) the HCPs to document the TB screening column ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| St. George General HP | Of the 10 cases selected from ART register: TB screening not documented for two cases (20%) | <ul style="list-style-type: none"> ✓ Inform (give on-job orientation/training to) the HCPs to document the TB screening column | Program Officers/Clinical Mentors | Next visit/SS | |

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|--------------------------------|---|--|-----------------------------------|---------------|---------|
| | | ✓ Follow up the practice during follow-up visits | | | |
| Pre-ART Register Review | | | | | |
| Bati General HP | Of the 10 cases selected from pre-ART register: 1) Age not documented for one case (10%) 2) Date of confirmed HIV positive not documented for three (30%) 3) TB screening not documented for six (60%) 4) CPT start date not documented for three (30%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document the age; date of confirmed HIV positive at enrollment, TB screening and CPT start date and stop date ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Ethio General HP | Of the nine cases selected from pre-ART register: 1) Date of confirmed HIV positive not documented for two (20%) 2) CPT start date not documented for three (30%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document the date of confirmed HIV positive at enrolment, and CPT start date and stop date ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Aflagat General HP | Of the 10 cases selected from pre-ART register, • Date of confirmed HIV positive had not documented for 2 cases : • TB screening and CPT start Date have not documented for 1 cases | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document the date of confirmed HIV positive at enrollment, TB screening, and CPT start date and stop date ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Selam General HP | Of the 10 cases selected from pre-ART register: 1) TB screening not documented for one (10%) 2) CPT start date not documented for three (30%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document TB screening, CPT start date and stop date ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| St. George General HP | Of the 10 cases selected from pre-ART register: CPT start date not documented for four | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document CPT start date and stop date | Program Officers/Clinical Mentors | Next visit/SS | |

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|---|--|---|-----------------------------------|---------------|---------|
| | (40%) | ✓ Follow up the practice during follow-up visits | | | |
| Follow-up Card Completeness Review for Pre-ART and ART Clients | | | | | |
| Bati General HP | Of the 10 follow-up cards selected: 1) TB screening not documented in three (30%) cards at least once in the quarter (April-June 2012) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document the TB screening status in the follow up card ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Selam General HP | Of the 10 follow-up cards selected: TB screening not documented in two (20%) cards at least once in the quarter (April-June 2012) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document the TB screening status in the follow up card ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| St. George General HP | Of the 10 follow-up cards selected: CPT start date not documented in one (10%) card at least once in the quarter (April-June 2012) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document the CPT start date in the follow up card ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Ethio G.HP | Gap not identified | ✓ Continue these good recording practices | | | |
| Aflagat G. HP | Gap not identified | ✓ Continue these good recording practices | | | |
| ART Register Completeness Review Six Months after Starting ART (Cohort at six month) | | | | | |
| Ethio General HP | Of the eight cases randomly selected from two-month cohort that passes six months: 1) CD4 count and regimen not documented for six (75%) 2) In four cases (50%) had not recorded all selected variables (regimen, follow up status, weight, height, and CD4) at six months in the ART register | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document the regimen; CD4 count; weight and height at 6, 12, 24, and 36 months ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Selam | Of the six cases randomly selected from two-month cohort that passes six months; | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and | Program Officers/Clinical | Next visit/SS | |

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|-------------------|---|---|--------------------|-------------|---------|
| General HP | Regimen, functional status, and height not documented for three (50%) | document the regimen; functional status, and height at 6, 12, 24, and 36 months ✓ Follow up the practice during follow-up visits | Mentors | | |

TB Register Review

| | | | | | |
|---------------------------------------|--|--|-----------------------------------|---------------|--|
| GAMBY Higher Clinic | Of the 10 cases selected: 1) Smear result not documented for five (50%) cases | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document smear result, in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Kidanemehret HC Bahir Dar | Of the 10 cases selected: 1) Smear result not documented for six (60%) cases 2) Category of TB not documented for one (10%) case 3) HIV test offered, performed and result not documented for two cases (20%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document smear result, category of TB; HIV test status in the TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| St. John Higher Medical Center | Of the 10 cases selected: 1) Smear result not documented for two (20%) cases 2) HIV test offered, performed and result not documented for six cases (60%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document smear result, HIV test status in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Aflagat General Hospital | Of the 10 cases selected: 1) Smear result not documented for one (10%) case | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document smear result, in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Alemsega HC | Of the 10 cases selected: 1) Smear result not documented for one (10%) case | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document smear result, in the unit TB register | Program Officers/Clinical Mentors | Next visit/SS | |

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|------------------------------|---|--|-----------------------------------|---------------|---|
| | | ✓ Follow up the practice during follow-up visits | | | |
| St. George General HP | Of the 10 cases selected: 1) Weight not documented for one (10%) case 2) HIV test offered, performed and result not documented for two cases (20%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document weight, HIV test status in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Hayat Kombolcha MC | Of the 10 cases selected: 1) Patient name not documented for two (20%) cases | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document patient name, in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | It helps for tracing in the case of discontinue the Rx |
| Shalom MC | Of the 10 cases selected: 1) Address of patient not documented for four cases (40%) 2) HIV test offered, performed and result not documented for four cases (40%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document patient address, HIV test status in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | It helps for tracing in the case of discontinue the Rx |
| Kombolcha Textile | Of the 10 cases selected: 1) Address of patient not documented for all (100%) cases 2) HIV test offered, performed and result not documented for seven cases (70%) 3) Sputum results at 2 months not documented for one case (10%), but documented at 5 and 7 months | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document patient address, patient HIV test status; sputum results at 2, 5, and 7 months in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | It is difficult for tracing in the case of discontinue the Rx |
| Teferi M. MC | Of the 10 cases selected: 1) HIV test offered, performed and result not documented for four cases (40%) 2) Continuation phase drug and dose not documented for one case (10%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document patient HIV test status, continuation phase drug and dose in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | All TB patients shall be tested for HIV |
| Wello HC | Of the 10 cases selected: 1) Continuation phase drug and dose not | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and | Program Officers/Clinical | Next visit/SS | |

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|----------------------------|---|---|-----------------------------------|---------------|---|
| | documented for one case (10%) 2) Sputum results at 2 months not documented for two cases (20%), but documented at 5 and 7 months | document continuation phase drug and dose; sputum results at 2, 5, and 7 months in the unit TB register ✓ Follow up the practice during follow-up visits | Mentors | | |
| Addis HC | Gap not identified | ✓ Continue these good recording practices | | | |
| Dr.Tekle-woin HC | Gap not identified | ✓ Continue these good recording practices | | | |
| Hayk MC | Gap not identified | ✓ Continue these good recording practices | | | |
| Merssa MC | Gap not identified | ✓ Continue these good recording practices | | | |
| HCT Register Review | | | | | |
| Teferi M. MC | Of the 10 cases selected: 1) Test result 3 not documented for three cases (30%) but test results 1 and 2 were documented | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document test result 3 or “NA” if not applicable in the unit HCT register. ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | <ul style="list-style-type: none"> • Patient referral linkage not recorded • Integrated PITC and VCT register |
| Kombolcha Textile | Of the 10 cases selected: 1) Test result 3 not documented for five cases (50%); but test results 1 and 2 were documented | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document test result 3 or “NA” if not applicable in the unit HCT register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Hayat MC Komb | Of the 10 cases selected: 1) Test result 3 not documented for four cases (40%); but test results 1 and 2 were documented | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document test result 3 or “NA” if not applicable in the unit HCT register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Hayk MC | Of the 10 cases selected: 1) Test result 3 not documented for one case (10%); but test results 1 and 2 were documented | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document test result 3 or “NA” if not applicable in the unit HCT register ✓ Follow up the practice during follow-up | Program Officers/Clinical Mentors | Next visit/SS | |

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|---------------------------------------|--------------------|--|--------------------|-------------|---------|
| | | visits | | | |
| Addis HC | Gap not identified | ✓ Continue these good recording practices | | | |
| Aflagat General Hospital | Gap not identified | ✓ Continue these good recording practices | | | |
| Almsaga HC | Gap not identified | ✓ Continue these good recording practices | | | |
| GAMBY Higher Clinic | Gap not identified | ✓ Continue these good recording practices | | | |
| Hayat MC | Gap not identified | ✓ Continue these good recording practices | | | |
| Kidanemehret HC | Gap not identified | ✓ Continue these good recording practices | | | |
| Kombolcha Textile | Gap not identified | ✓ Continue these good recording practices | | | |
| Merssa MC | Gap not identified | ✓ Continue these good recording practices | | | |
| Shalom MC | Gap not identified | ✓ Continue these good recording practices | | | |
| St. John Higher Medical Center | Gap not identified | ✓ Continue these good recording practices | | | |
| Wollo HC | Gap not identified | ✓ Continue these good recording practices | | | |

ANNEX C: FACILITY-SPECIFIC GAPS IDENTIFIED AND RECOMMENDED ACTIONS FOR DATA QUALITY, DIRE DAWA CITY ADMINISTRATION

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|---|--|---|--------------------------------------|---------------|---------|
| Facility-based HCT Register Review ➤ ART General Hospital (in Dire Dawa) had not started to record in the VCT register during the assessment period (July 2012) because it is in the initiation period of the services supported by PHSP ➤ Yemariamwerk Hospital (in Dire Dawa) had no VCT registration log book, only a laboratory log book | | | | | |
| Dire HC | Of the 10 cases selected: 1) HIV test results (1, 2, 3, and final test result) not documented for three cases (30%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document test results (1, 2, 3 and final test result) or "NA" if not applicable in the unit HCT register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Africa MC | Of the 10 cases selected: 1) Post-test counseling not documented for all cases (100%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document post-test counseling in the unit HCT register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Yemariamwerk Hospital | There was no VCT registration log book only had laboratory log book | Deliver the VCT register and give on-job orientation/training to the HCPs to use the VCT registration log book | Program Officers/Clinical Mentors/QM | ASAP | |
| ART G. Hospital | During the assessment period (July 2012) it had not started to record in the VCT register, because it is in the initiation period of the service supported by PHSP | ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Abadir MC | Gap not identified | ✓ Continue these good recording practices | | | |

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|---------------------------|--|---|-----------------------------------|---------------|--|
| Betel MC | Gap not identified | ✓ Continue these good recording practices | | | |
| Mariam-work Clinic | Gap not identified | ✓ Continue these good recording practices | | | |
| TB register Review | | | | | |
| ART General HP | Of the 10 cases selected: 1) Unit TB number not documented for six (60%) cases 2) Four cases (40%) of smear result, weight, and sex, and three cases (30%) of age and address not documented 3) Category of TB not documented for one case (10%) 4) HIV test offered, performed and result not documented for four cases (40%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document unit TB #, smear result, category of TB, age, sex, weight, address, and HIV test status in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Africa MC | Of the 10 cases selected: 1) Address of the patients not documented for two cases (20%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document address in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | It helps for tracing in the case of discontinue the Rx |
| Bilal Hospital | Of the 10 cases selected: 1) Address of the patients not documented for two cases (20%) 2) HIV test offered, performed, and result not documented for one case (10%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document address, HIV test status in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | It helps for tracing in the case of discontinue the Rx |
| Abadir MC | Of the 10 cases selected: 1) Smear result, age, weight, and address not documented for one case (10%) 2) HIV test offered, performed and result not documented for three cases (30%) 3) Of five eligible cases, continuation phase drug and dose not documented for one case (20%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document smear result, HIV test status, continuation phase drug and dose; sputum results at 2, 5, and 7 months in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| | Of the 10 cases selected: | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document address, HIV test status in the unit TB register ✓ Follow up the practice during follow-up visits | Program | Next visit/SS | |

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|------------------------------|--|--|---------------------------|-------------|---------|
| Yemariamwerk Hospital | 1) HIV test offered, performed, and result not documented for one case (10%) 2) Of five eligible cases, continuation phase drug and dose not documented for three cases (60%) | to) the HCPs to give emphasis and document HIV test status, continuation phase drug and dose; sputum results at 2, 5, and 7 months in the unit TB register ✓ Follow up the practice during follow-up visits | Officers/Clinical Mentors | | |
| Bilal Hospital | Gap not identified | ✓ Continue these good recording practices | | | |
| Dire HC | Gap not identified | ✓ Continue these good recording practices | | | |
| Mariam-work Clinic | Gap not identified | ✓ Continue these good recording practices | | | |

ANNEX D: FACILITY-SPECIFIC GAPS IDENTIFIED AND RECOMMENDED ACTIONS FOR DATA QUALITY, HARARI REGION

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|---|---|--|--|---------------|---------|
| Facility-based HCT Register Review | | | | | |
| ➤ Yemag Medical center (in Harar) had not used standard VCT register (In this site they used agenda, as a log book and it captures only date, age sex and test result (final)) | | | | | |
| Awash Clinic | Of the 10 cases selected: 1) Post-test counseling not documented for six cases (60%) 2) Pre-test counseling not documented for one case (10%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document pre-test and post-test counseling in the unit HCT register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Yemag Medical Center | 1) Did not use standard VCT register (Used facility agenda as a log book, and it captures only date, age, sex, and final test result) | ✓ Deliver the VCT register and give on-job orientation/training to the HCPs to use the VCT registration log book ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors/QM | ASAP | |
| TB Register Review | | | | | |
| ➤ Awash Medium Clinic had not provided the service (PPM DOT), only referred | | | | | |
| 2) | | | | | |
| Awash Medium Clinic | 1) Did not provide PPM DOTs, only referred | ✓ Giving training, deliver registers ✓ Follow up the practice during follow-up visits | Program Coordinators/Program Officers/QM | | |
| Yemag Medical Center | Of the 10 cases selected: 1) Of seven eligible cases, continuation phase drug and dose not documented for one case (14%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document continuation phase drug and dose in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |

ANNEX E: FACILITY-SPECIFIC GAPS AND RECOMMENDED ACTIONS FOR DATA QUALITY, OROMIA REGION

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|---------------------------------|--|--|-----------------------------------|---------------|---------|
| HCT Register Assessment: | | | | | |
| Dembel HC | Of the 10 cases selected: 1) Date of HIV tested not documented for five cases (50%) | <ul style="list-style-type: none"> ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document date in the unit HCT register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Temkinel Afiya MC | Of the 10 cases selected: 1) Date of HIV tested not documented for one case (10%) 2) Age not documented for two cases (20%) 3) HIV test results (1, 2, 3, and final test result) not documented for six cases (60%) | <ul style="list-style-type: none"> ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document date, age, test results (1, 2, 3, and final test result) in the HCT register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Rhobot HC | Of the 10 cases selected: 1) Date of HIV test not documented for one case (10%). 2) Pre-test and post-test counseling not documented for two cases (20%) | <ul style="list-style-type: none"> ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document date, pre-test, and post-test counseling in the HCT register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Holeta MC | Of the 10 cases selected: 1) Age not documented for eight cases (80%) | <ul style="list-style-type: none"> ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document age in the HCT register. ✓ Follow up the practice during follow-up visits | | | |
| Agape MC | Gap not identified | ✓ Continue these good recording practices | | | |
| Ambo HC | Gap not identified | ✓ Continue these good recording practices | | | |

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|------------------------------|---|--|-----------------------------------|---------------|---|
| Ethio-Africa HC | Gap not identified | ✓ Continue these good recording practices | | | |
| Hora MC Sebeta | Gap not identified | ✓ Continue these good recording practices | | | |
| Jimma HC | Gap not identified | ✓ Continue these good recording practices | | | |
| Mugher Cement Factory | Gap not identified | ✓ Continue these good recording practices | | | |
| Universal HC Jimma | Gap not identified | ✓ Continue these good recording practices | | | |
| TB Register Review | | | | | |
| Universal HC Jimma | Of the 10 cases selected: 1) Unit TB number, address of client, age, sex, weight not documented for one case (10%) 2) HIV test offered, performed and result not documented for two cases (20%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document unit TB number, address, age, sex, weight, HIV test status in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | Address helps for tracing in case patient discontinues Rx |
| Jimma HC | Of the 10 cases selected: 1) Address of clients not documented for four cases (40%) 2) Category of TB, smear result, weight not documented for one case (10%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document, category of TB, smear result, address, weight, in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | Address helps for tracing in case patient discontinues Rx |
| Temkinel Afiya MC | Of the 10 cases selected: 1) Address of clients not documented for four cases (40%) 2) Sex, weight, treatment start date, intensive phase drug and dose not documented for one case (10%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document address, sex, weight, treatment start date, intensive phase dose and drug, HIV test status, sputum test result in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | Address helps for tracing in case patient discontinues Rx |

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|------------------------|--|--|-----------------------------------|---------------|---|
| | 3) HIV test offered, performed and result not documented for one case (10%) 4) One case were smear result="NA" because of EP, but they had sputum result documented at 2, 5, and 7 months in the unit TB register | | | | |
| Ambo HC | Of the 10 cases selected: 1) Address of clients not documented for eight cases (80%) 2) HIV test offered, performed and result not documented for one case (10%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document address, HIV test status, in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | Address helps for tracing in case patient discontinues Rx |
| Agape HC | Of the 10 cases selected: 1) Address of clients not documented for seven cases (70%) 2) Smear result, sex, treatment start date not documented for one case (10%) 3) HIV test offered, performed and result not documented for one case (10%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document smear result, address, sex, treatment start date, HIV test status, in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | Address helps for tracing in case patient discontinues Rx |
| Ethio-Africa HC | Of the 10 cases selected: 1) Address of clients not documented for one case (10%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document address, in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | Address helps for tracing in case patient discontinues Rx |
| Rhobot HC | Of the 10 cases selected: 1) Address of clients not documented for one case (10%) 2) HIV test offered, performed and result not documented for two cases (20%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document address, HIV test status, in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | Address helps for tracing in case patient discontinues Rx |

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|------------------------------|--|---|-----------------------------------|---------------|---------|
| Holeta Medical Center | Of the 10 cases selected: 1) Category of TB not documented for one case (10%) 2) HIV test offered, performed and result not documented for three cases (30%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document category of TB, HIV test status, in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Mugher Cement Factory | Of the 10 cases selected: 1) HIV test offered, performed and result not documented for one case (10%) 2) Of six eligible cases, continuation phase drug and dose not documented for one case (17%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document HIV test status Continuation phase drug and dose in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Dembel HC | Of the six cases selected: 1) HIV test offered, performed and result not documented for one case (17%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document HIV test status in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Hora MC Sebeta | Gap not identified | ✓ Continue these good recording practices | | | |

ANNEX F: FACILITY-SPECIFIC GAPS IDENTIFIED AND RECOMMENDED ACTIONS FOR DATA QUALITY, SNNP REGION

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|---------------------------------|---|---|-----------------------------------|---------------|---------|
| HCT Register Assessment: | | | | | |
| Fitsum Medium Clinic | Of the 10 cases selected: 1) Pre-test counseling and post-test counseling not documented for four cases (40%) and three cases (30%) respectively 2) Test results 1 and 2 recorded but result 3 was not documented for two cases (20%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document pre-test and post-test counseling, test results (1, 2, 3 and final test result) in the HCT register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Beteseb MC | Of the 10 cases selected: 1) Pre-test counseling and post-test counseling not documented for two cases (20%) and all cases (100%) respectively 2) Test result 1 recorded, but final test result had not recorded for two cases (20%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document pre-test and post-test counseling, test results (1, 2, 3 and final test result) in the HCT register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Selam HC | Of the 10 cases selected: 1) Pre-test counseling and post-test counseling not documented for one case (10%) and eight cases (80%) respectively | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document pre-test and post-test counseling, in the HCT register ✓ Follow up the practice during | Program Officers/Clinical Mentors | Next visit/SS | |

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|---------------------------|---|---|-----------------------------------|---------------|----------------------------|
| | | follow-up visits | | | |
| Asher Hospital | Of the 10 cases selected: 1) Test result 1 and 2 recorded but result 3 not documented for three cases (30%) 2) Test result 1 recorded, but final test result had not recorded for two cases (20%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document test results (1, 2, 3, and final test result) in the HCT register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Central HC | Of the 10 cases selected: 3) Test result 1 and 2 recorded but result 3 not documented for two cases (20%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document test results (1, 2, 3, and final test result) in the HCT register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Haik Dar HC | Of the 10 cases selected: 1) Test result 1 recorded, but final test result had not recorded for nine cases (90%). (If test result 1 is 'NR', final test result had not recorded in the VCT register) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document test results (1, 2, 3, and final test result) in the HCT register even if test result 1 is "NR" ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Tikur Wuha HC | Of the five cases selected: 1) Post-test counseling not documented for all (100%) in the VCT register | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document pre-test and post-test counseling, in the HCT register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Dr. Muluneh Medium | Of the 10 cases selected: 1) Post-test counseling not documented for all (100%) in the VCT register | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and | Program Officers/Clinical Mentors | Next visit/SS | PITC register had not used |

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|----------------------------------|---|---|-----------------------------------|---------------|---|
| Clinic | | document pre-test and post-test counseling, in the HCT register ✓ Follow up the practice during follow-up visits | | | properly? |
| St. Gebriel MC | Of the 10 cases selected: 1) Post-test counseling not documented for all (100%) in the VCT register | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document pre-test and post-test counseling, in the HCT register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Bethel HC | Gap not identified | ✓ Continue these good recording practices | | | |
| Hakima MC | Gap not identified | ✓ Continue these good recording practices | | | |
| TB Register Review | | | | | |
| Dr. Muluneh Medium Clinic | Of the 10 cases selected: 1) Address of clients not documented for eight cases (80%) 2) Age not documented for two cases (20%) 3) Smear result, sex not documented for one case (10%) 4) Category of TB not documented for three cases (30%) 5) Intensive phase drug and dose not documented for one case (10%) and two cases (20%) respectively 6) HIV test offered, performed and result not documented for three cases (30%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document, address, age, sex, smear result, category of TB, intensive phase drug and dose, HIV test status in the unit TB register ✓ Follow up the practice during follow-up visit | Program Officers/Clinical Mentors | Next visit/SS | Address helps for tracing in case patient discontinues Rx |
| Fitsum Medium Clinic | Of the three cases selected: 1) Smear result not documented for one case (33%) 2) HIV test offered, performed and result not documented for one case (33%) 3) One case were smear result ="NA" | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document, smear result, HIV test status, sputum test result in the unit TB register | Program Officers/Clinical Mentors | Next visit/SS | |

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|-----------------------|--|---|-----------------------------------|---------------|--|
| | because of EP, but they had sputum result documented at two months in the unit TB register | ✓ Follow up the practice during follow-up visits | | | |
| Tikur Wuha HC | Of the ten cases selected: 1) Weight not documented for one case (10%) 2) HIV test offered, performed and result not documented for two cases (20%) 3) Three case were smear result = "NA" because of EP, but they had sputum result documented at 2 months in the unit TB register | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document, weight, HIV test status, sputum test result, in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Selam HC | Of the ten cases selected: 1) Weight not documented for one case (10%). 2) Intensive phase dose not documented for one case (10%). 3) HIV test offered, performed and result not documented for one case (10%). 4) Two cases were smear result="NA" because of EP, but they had sputum result documented at 2, 5, and 7 months in the unit TB register | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document, weight, intensive phase dose, HIV test status, sputum test result, in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Betel MC | Of the 10 cases selected: 1) HIV test offered, performed and result not documented for five cases (50%). | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document HIV test status, in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| St. Gabriel MC | Of the four cases selected: 1) HIV test offered, performed and result not documented for one case (25%) | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document HIV test status, in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | <ul style="list-style-type: none"> • Only four TB patients follow TB Rx. • The registratio |

| Facility | Gaps Identified | Actions Recommended for Maintaining Data Quality | Responsible Person | Time Period | Remarks |
|------------------------------|--|---|-----------------------------------|---------------|-------------------------|
| | | | | | n book is not complete. |
| Asher Hospital | Of the 10 cases selected: 1) Four cases were smear result ="NA" because of EP, but they had sputum result documented at 2 months (for three cases) and a, 5, and 7 months (for one case) in the TB register | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document Sputum test result, in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Beteseb Medium Clinic | Of the 10 cases selected: 1) Two cases were smear result ="NA" because of EP, but they had sputum result documented at 2 months in the unit TB register | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document sputum test result in the unit TB register ✓ Follow up the practice during follow-up visits. | Program Officers/Clinical Mentors | Next visit/SS | |
| Hikma MC | Of the 10 cases selected: 1) Two cases were smear result ="NA" because of EP, but they had sputum result documented at 2 months in the unit TB register | ✓ Inform (give on-job orientation/training to) the HCPs to give emphasis and document sputum test result, in the unit TB register ✓ Follow up the practice during follow-up visits | Program Officers/Clinical Mentors | Next visit/SS | |
| Haik Dar HC (Hawassa) | During the DQA conducted (June 12), in the TB register TB patients were recorded only in 2002 EC, after that they only referred. | | | | |